

624, 18

CATALOG NO. 10

"CHOICE OF A THOUSAND BUILDINGS"

*Modern*

# Milliken Buildings



See PRICE LISTS

Pages 12 to 23

Subject to

**DISCOUNTS**  
ON APPLICATION

TRANSMISSION TOWERS ~ RADIO TOWERS ~ PINLOCK POLES

624, 18



**M**ILLIKEN INDUSTRIES™, supported by the STANDARDIZED TRAILER UNIT SYSTEM (Patented),  
adapted to this catalog, are designed to facilitate transportation by rail or water or by ground truck, to minimize the use of labor and tools in erection, and to cover a wide range of industrial service.

And for EXPLANATION OF SYMBOLS, Catalog No. 11, a book containing technical plans, elevation diagrams, construction details and complete directions for erecting MILLIKEN INDUSTRIES.

# MILLIKEN BUILDINGS

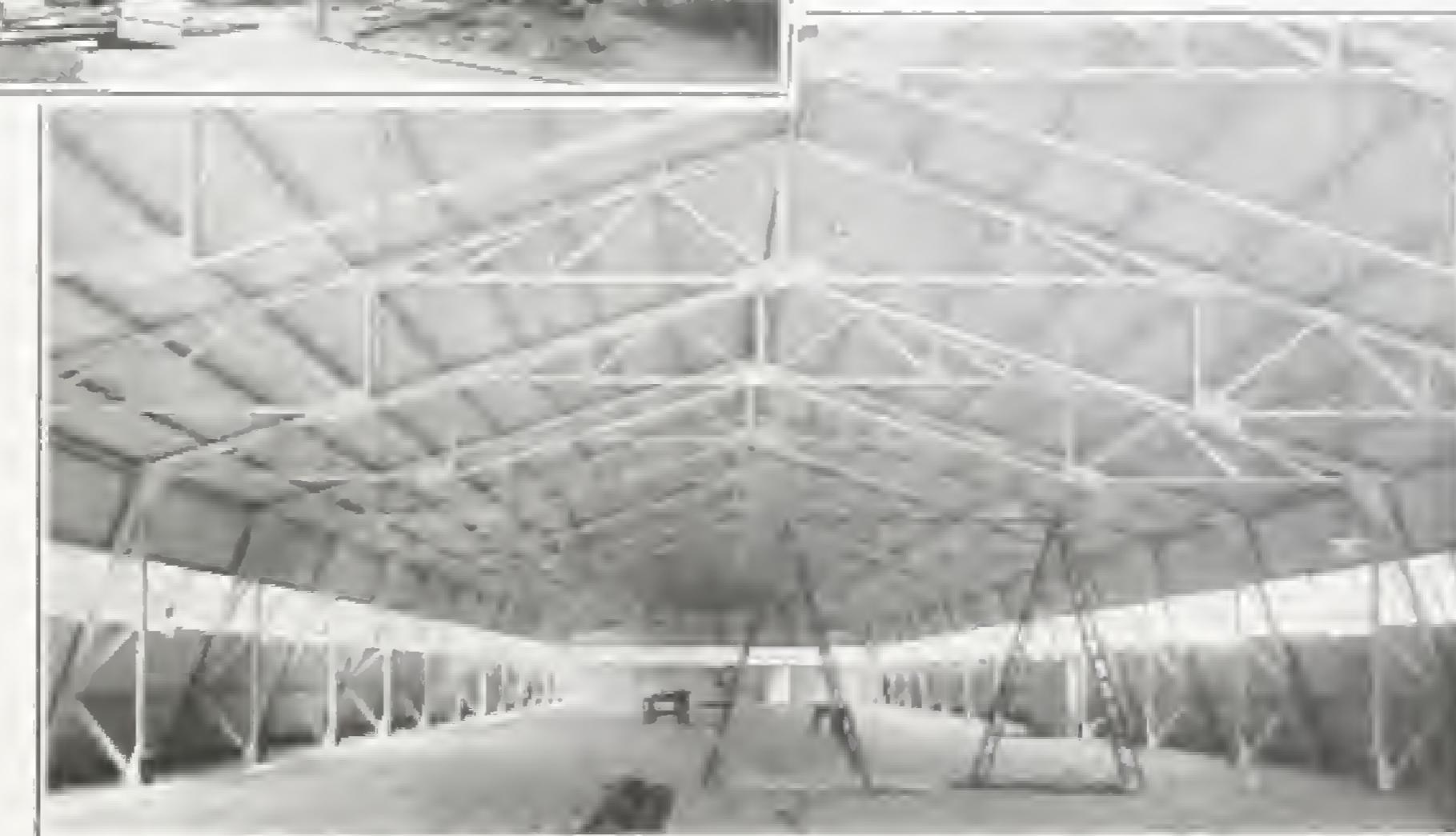
Patented Portable Steel Buildings



SHIPMENT  
PROMPT AND IN COMPACT FORM, AS SHOWN BY  
CAR IN FOREGROUND. TRAIN IN BACKGROUND  
CARRYING CONVENTIONAL HOUSES.



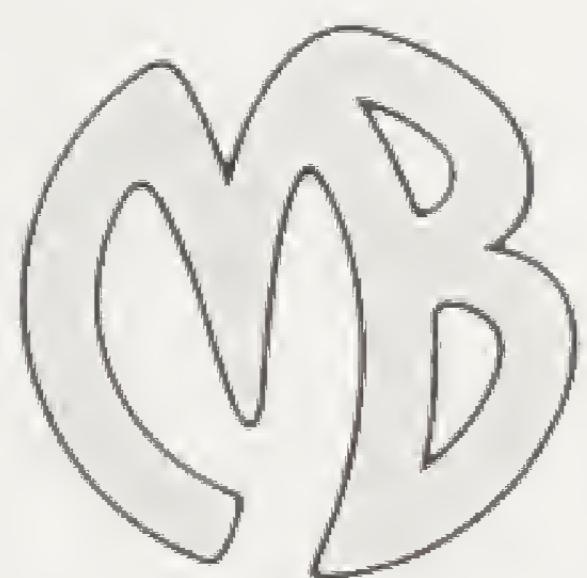
ERCTION  
A LONGBEAM POLE AND A FEW WRENCHES



COMPLETION  
CLOUDLESS, FREE FROM DUST.

## PERMANENT—FIREPROOF ALL-STEEL

Made of Structural Steel, with heavy  
Steel Enclosure. Sash, Doors, Skylights,  
Gutters and Leaders complete.



AMERICAN SALES AND MANUFACTURING

## MILLIKEN BROTHERS MFG. CO., (INC.)

OFFICES: Woolworth Building, New York City  
PLANT: 136th St. and East River, New York City

PACIFIC COAST OFFICE  
San Francisco, Cal.

WESTERN OFFICE  
Majestic Building, Chicago, Ill.

EUROPEAN SALES AND MANUFACTURING

## MILLIKEN MANUFACTURING SYNDICATE, LTD.

Amberley House, Norfolk Street, Strand, London, W. C. 2.  
Works: Widnes Foundry Company, Ltd.

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## MEETING THE NEEDS OF THE DAY

**R**ECENT war demands have brought about a general recognition of the value and advantages of standardized building construction. Standardization of buildings means low manufacturing costs, quick shipments of material, the saving of valuable time ordinarily required for the preparation of plans and specifications, and a minimum of expense throughout every feature of the work. In all of this, the owner or the purchaser is the one who derives the direct benefit.

Right methods of standardization make possible the purchase of a building directly from a printed description, and this catalog is issued with one main point in mind—that the intending purchaser may make his selection of a complete all-steel building right from this book, thus saving time, trouble and expense. *It is the modern way.*

The following pages set forth detailed information and illustrations covering the general appearance of MILLIKEN BUILDINGS, giving dimensions, sash and door arrangements,

prices, shipping weights, etc., so that the purchaser may see at once just what he is ordering. Complete details of construction for every feature of foundation and erection are amplified in the "Erection Handbook," which will be sent on request, either before or after the order is placed. There is nothing to delay the work from beginning to end; prompt execution of order and service are assured.

The STANDARDIZED TRUSS UNIT SYSTEM, which is the basis of the structural steel work of the MILLIKEN BUILDINGS, has found decided favor for Government buildings, where demands are exacting, and hundreds of buildings, one-story height, with clear span roof trusses, as described in this book, have been erected for this character of service.

The MILLIKEN BUILDINGS have been developed by manufacturers established since 1857, affording the purchaser a guarantee that the building will be in strict accordance with the specifications and data set forth in this catalog, with first-class material and workmanship throughout.

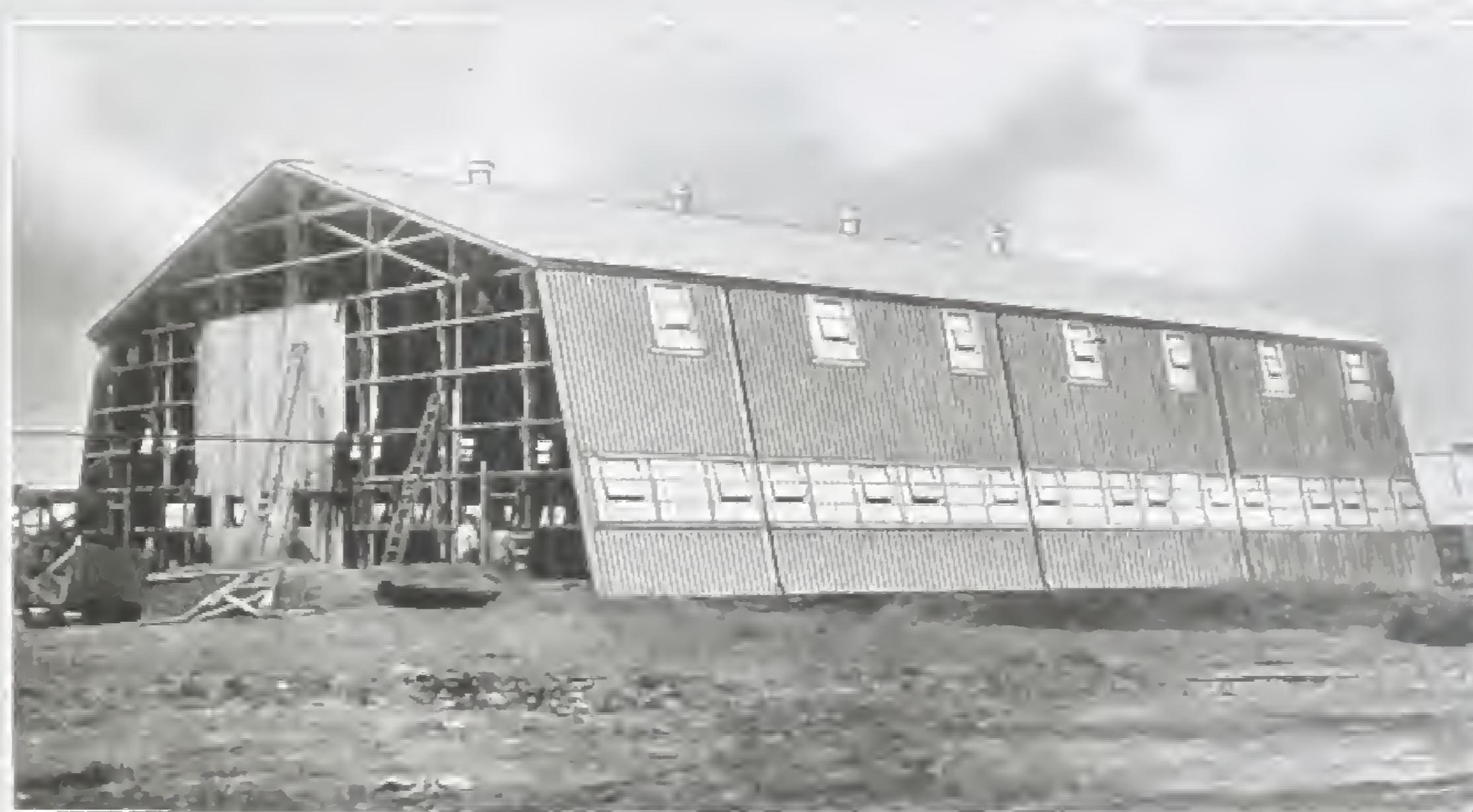
MB  
TP



EXHIBITION BUILDING  
WASHINGTON, D. C.



TWIN BUILDINGS  
ANATO, N. J.



TYPE OF SEAPLANE HANGAR  
AT  
MONTAUK, N. Y.  
CAPE MAY N. J.  
KEY WEST, FLA.  
PANAMA CANAL



REAR VIEW, KITE BALLOON HANGAR  
FORT MONROE, VA.



AEROPLANE HANGAR  
WASHINGTON, D. C.

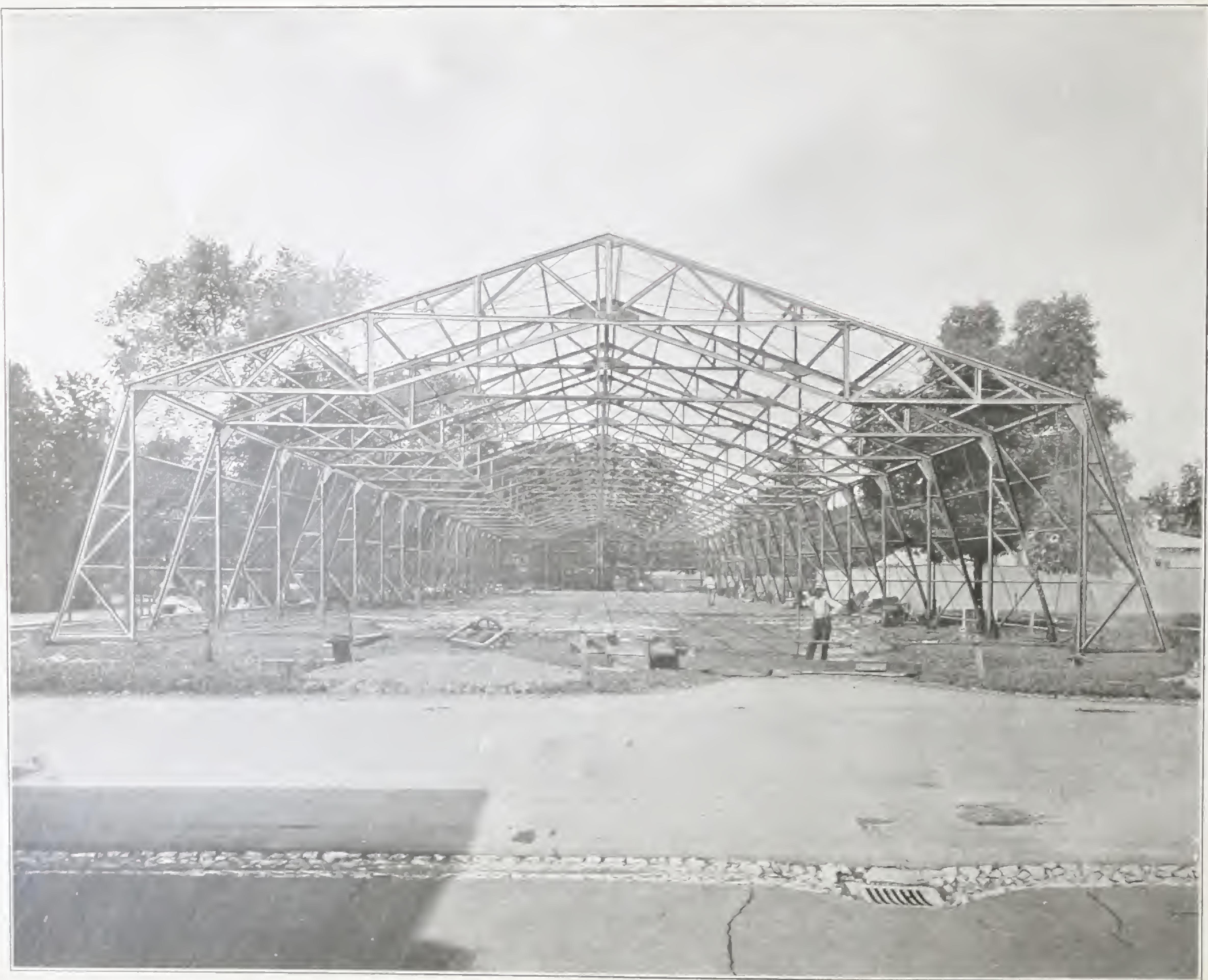


FIG. 216

COMPLETE STEEL FRAME-STANDARDIZED TRUSS UNIT SYSTEM



## THE STANDARDIZED TRUSS UNIT SYSTEM

**T**HE Standardized Truss Unit System (patented), which is the basis of the MILLIKEN BUILDINGS, is the answer to the demand for a steel construction that can be built up to many requirements of size and shape by means of a small common Unit.

This system is designed and manufactured by engineers who have had the experience of many years in designing and manufacturing steel industrial buildings; it is believed to be the last word in simplicity and flexibility.

### PRINCIPLE OF DESIGN

The trusses and columns of the Standardized Truss Unit System are composed of triangular Units, easily and quickly bolted together in many different combinations.

The Unit, as seen from the illustration on this page, is of convenient size, built of standard structural steel shapes and plates, and is complete in itself. The method of fabrication insures the accuracy of the Units, and whether they are used as parts of columns or trusses they will be found *alike and interchangeable*.

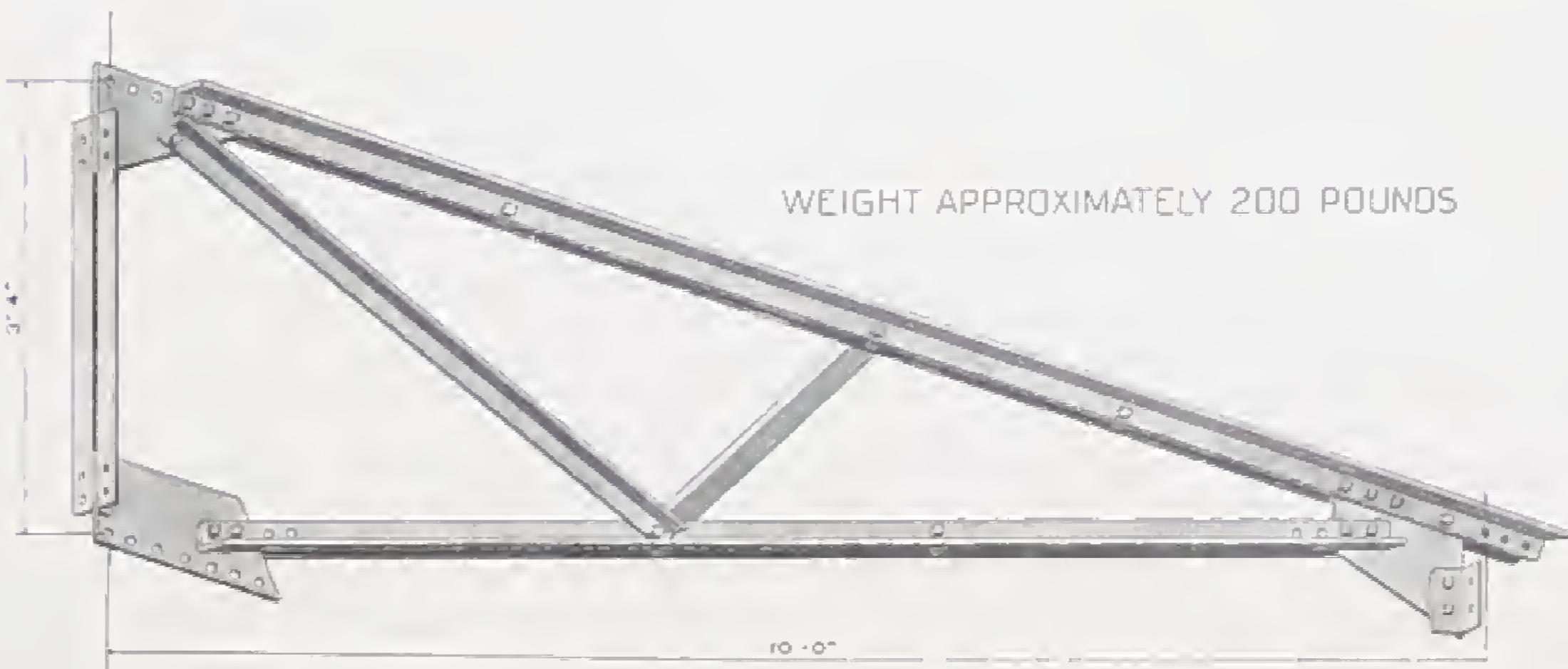
This construction stands alone and must not be confused with "ready-built" or "sectional" buildings, which are usually of a temporary character. The Standardized Truss Unit construction is flexible in dimensions and of a permanent nature. Should it be necessary later to dismantle or remove any building, this can easily be done and the Unit parts used without loss in other buildings of entirely different character.

### SIZE AND ADAPTABILITY

The standardized dimensions of the triangular Unit are 10 feet long and 3 feet 4 inches high, which makes possible a large number of combinations both ways, to afford suitable height and width. The articulated character of the Standardized Truss Unit System, obtained by bolting together uniform sections, is a feature to be kept in mind. It is this that adapts it to all sorts of buildings, large and small.

This system also includes all necessary auxiliary members, such as roof purlins, siding girts, bracing rods, sag rods, door and window framing, bolts, etc., to make up a *complete steel skeleton frame structure*, as shown on opposite page.

Bear in mind that the Standardized Truss Unit System produces *clear span buildings* that are really portable, that are really flexible, and whose parts are really interchangeable. It is the last word in standardization of industrial building construction.



TYPICAL UNIT--STANDARDIZED TRUSS UNIT SYSTEM



## ACCURACY IN SHOP WORK—ECONOMY IN SHIPMENTS

In the production of the Standardized Truss Unit, shop operations are to fixed gage and steel templates. This guarantees absolute correctness of dimensions, and insures the greatest speed and efficiency in assembling, bolting and erecting. There are no misfits, nor any expensive errors to correct in the field.

The Standardized Truss Unit System conserves railroad facilities: it makes compact loads and thus utilizes the maximum capacity of cars, which is not the case in the loading of structural steel of conventional design. All material is shipped "knocked down," small parts packed in bundles, boxes or kegs of convenient size for ready handling. This not only economizes space, but reduces materially the cost of freight transportation.

There is the same measure of economy for export shipment. It stows in a minimum of cargo space; no special loading provisions and no heavy hoisting machinery are required—simply common labor for the "knocked down" parts and bundles, the heaviest of which may be quickly handled by one or two men in loading and unloading.

### AS APPLIED TO MILLIKEN BUILDINGS

The line and photographic reproductions on opposite page illustrate strikingly some of the many combinations that are

made from the Standardized Truss Unit. In order to meet the most general demands, the MILLIKEN BUILDINGS have been developed on the types shown by figures 1, 2, 3, 4, 5 and 6, with *alternate designs using vertical columns instead of Unit columns*.

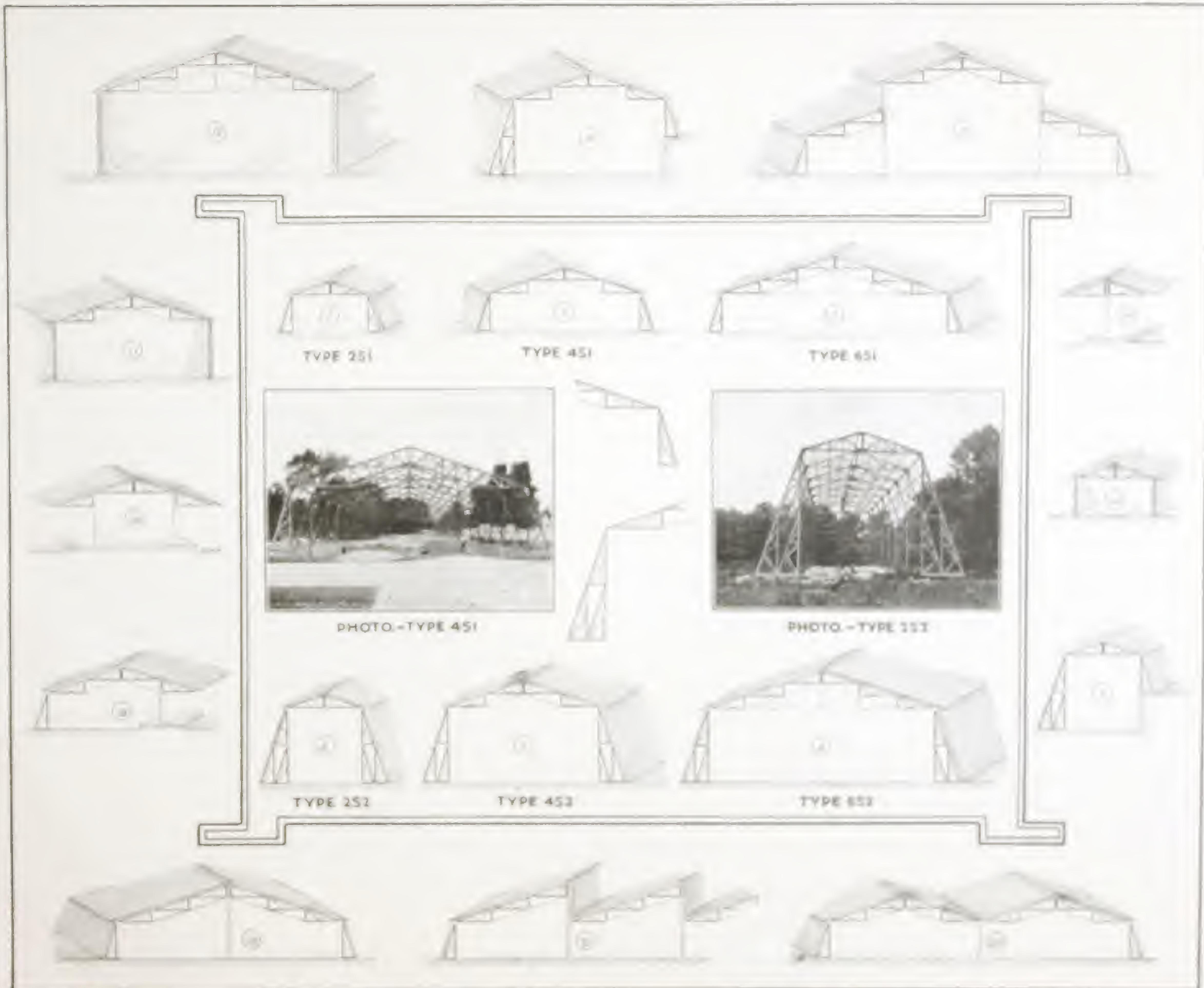
The buildings are made in two heights, 11 feet and 21 feet, with *either vertical or sloping side walls*, and in roof widths of 20 feet, 40 feet and 60 feet, respectively. These widths represent the roof spans of all buildings, whether with vertical columns and vertical side walls, or with Unit columns and sloping side walls.

The buildings with vertical columns and vertical side walls have floor widths equal to the roof spans, viz.: 20 feet, 40 feet and 60 feet, respectively.

The buildings with sloping side walls have much greater available floor widths due to the widening of the side walls gained by the use of the triangular Unit columns. The single height buildings (11 feet high), with sloping side walls, have floor widths of 27 feet, 47 feet and 67 feet, respectively. The double height buildings (21 feet high), with sloping side walls, have floor widths of 34 feet, 54 feet and 74 feet, respectively.

Lengthwise, the buildings are standardized on the basis of 20-foot panels, so that buildings can be furnished in any multiples of this length, such as 20, 40, 60, 80, 100 feet and so on.

*There are no interior columns in any of the buildings, all having a free, clear floor space throughout.*



VARIOUS COMBINATIONS OF THE STANDARDIZED TRUSS UNIT  
CENTER GROUP ILLUSTRATES BASIS OF MILLIKEN BUILDINGS



## MILLIKEN BUILDINGS

**S**PECIFICATIONS, illustrations and prices of twelve different Types of MILLIKEN BUILDINGS, each developed in six Styles and in various lengths, will be found on pages 12 to 23 inclusive. These afford a choice of many hundreds of buildings from which selections can be readily made to meet a wide variety of needs.

Each Type and Style of building is clearly specified and illustrated, and the purchaser will have no difficulty in selecting the buildings he desires.

The structural steel work, together with the enclosure and furnishings of MILLIKEN BUILDINGS, have all been designed with the utmost simplicity to insure ease and rapidity of erection by local labor. All connections are bolted, and the individual members are of such size and weight that every piece can easily be carried by two men.

MILLIKEN BUILDINGS are designed to withstand the wind pressure equivalent to an indicated velocity of 100 miles

per hour, or a snow load of 25 pounds per square foot accompanied by an indicated wind velocity of 60 miles per hour. The roof trusses and columns are sufficient to support light line-shafting or overhead trolley loads when attached adjacent to connection joints.

The enclosure of all MILLIKEN BUILDINGS consists of standard heavy gauge corrugated steel, painted or galvanized as desired, with various arrangements of steel sash, doors and skylights to meet different needs. All buildings are furnished with heavy galvanized steel gutters and leaders, flashing, trim, etc., complete.

STEEL SASH are of solid bar type, designed to receive stock sizes of glass. All sash are 6 feet 2 inches wide by 4 feet 8 inches high. Continuous sash comprise three sash to each 20-foot panel, connected with mullion plates, the center sash in each bay being stationary. All other sash throughout have pivoted ventilating sections 4 feet by 3 feet, provided with hand chains for opening, closing and locking.



STEEL DOORS are of simple, strong construction, designed to give real service. Small entrance doors, N3, 3 feet by 7 feet, on ends of buildings, are paneled steel doors, hinged type, with Yale cylinder locks. All other doors are of the sliding type, made of structural and corrugated steel, with heavy bar track and hangers, guide rollers and overhead hoods complete. The standard End Wall Doors, N8, are 8 feet 9 inches wide by 8 feet 6 inches high. Special End Wall Doors 8 feet 9 inches wide by 10 feet high will be furnished when required at an additional price.

It will be noted on the following pages that Side Wall Doors for MILLIKEN BUILDINGS are priced separately. These doors are included in 20-foot Side Door Panels, are interchangeable with standard Side Wall Panels, and can therefore be placed as desired when erecting the building.

STEEL SKYLIGHTS are of standard galvanized steel construction, 5 feet 2 inches by 5 feet 3 inches, complete with cap bars and flashing, and designed to receive stock widths of glass.

The standard equipment of the MILLIKEN BUILDINGS will meet the general demands for buildings of this character. The construction, however, will permit the addition or substitution of certain special furnishings when so required. These are described and priced on Page 28, and comprise three different means for obtaining additional roof ventilation as well as a special "All-Steel" foundation for Unit columns, making concrete or timber foundations unnecessary.

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A few of the many uses for which MILLIKEN BUILDINGS  
are particularly suited may be mentioned:

General Storage Buildings	Light Manufacturing Plants
Cement Storehouses	Power Houses
Tobacco Warehouses	Boiler Houses
Sugar Warehouses	Machine Shops
Cotton Oil Storage	Foundries
Grinding Mills	Freight Houses
Dairy Buildings	Saw Mills
Farm Buildings	Textile Mills
Godowns	Paint Mills
Stock Houses	Dye Factories
Sheep Sheds	Garages
Equipment Buildings	Hangars





## MILLIKEN BUILDINGS—TYPES 2S1 AND 2V1

Dimensions given in feet (Ft.) and meters (M.)

### SPECIFICATIONS

#### Structural Steel Work

Structural steel frame work of standardized Truss Unit System throughout. All connections bolted. Diagonal bracing rods furnished on the basis of bracing both end bays and each fourth interior bay. All work to have one shop coat of paint.

TYPE 2S1 buildings have columns of standard Units, furnished with set of column anchor bolts in addition to set of lag screws, making use of concrete or timber foundations optional.

TYPE 2V1 buildings have vertical channel bar columns and column anchor bolts for concrete foundations.

#### Finishing Work

All buildings furnished with *painted* corrugated steel roof, side walls and end walls; *galvanized* steel gutters, leaders, ridge roll, rive flashing, gable flashing and corner trim; full complement of clips, bolts and washers for fastening in accordance with prescribed details. The different Styles of buildings shown on opposite page are based on various arrangements of *end wall doors*, *sash* and *skylights* as described in the next column.

#### STYLE A

Roof—2 steel skylights 5 ft. 2 in. by 5 ft. 3 in. every 20 feet in length of building.  
Each End Wall—1 steel hinged door N3, 3 ft. by 7 ft. (no sash).  
Each Side Wall—Closed without sash.

#### STYLE B

Roof—2 steel skylights 5 ft. 2 in. by 5 ft. 3 in. every 20 feet in length of building.  
Each End Wall—1 steel sliding door N8, 8 ft. 2 in. by 8 ft. 6 in. (no sash).  
Each Side Wall—Closed without sash.

#### STYLE C

Roof—Closed without skylights  
Each End Wall—1 steel hinged door N3, 3 ft. by 7 ft. (no sash).  
Each Side Wall—1 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet in length of building.

#### STYLE D

Roof—Closed without skylights  
Each End Wall—1 steel sliding door N8, 8 ft. 2 in. by 8 ft. 6 in. (no sash).  
Each Side Wall—1 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet in length of building.

#### STYLE E

Roof—Closed without skylights  
Each End Wall—1 steel hinged door N3, 3 ft. by 7 ft. (no sash).  
Each Side Wall—Continuous steel ventilating and stationary sash 6 ft. 8 in. high.

#### STYLE F

Roof—Closed without skylights  
Each End Wall—1 steel sliding door N8, 8 ft. 2 in. by 8 ft. 6 in. (no sash).  
Each Side Wall—Continuous steel ventilating and stationary sash 6 ft. 8 in. high.

### List Prices

List prices for various lengths of buildings given on opposite page are in each case for a complete building of the Type, Style and Length shown. Buildings of additional length, in multiples of 20 feet, are furnished at prices found by adding for each additional 20 feet in length the amount given in the column "Add for each 20-foot Length."

The buildings as priced do not include Side Wall Doors. When such doors are required, add the price of each as given in the last two columns. These doors will be of the sliding type, similar in construction to the End Wall Doors and of two sizes:

L4 or K4—4 ft. 11 in. wide by 8 ft. 6 in. high.

L8 or K8—8 ft. 9 in. wide by 8 ft. 6 in. high.

Each Side Wall Door is included in a 20-foot Side Wall Panel for one side of building, and the price given is the extra cost of this panel over that of the standard 20-foot Side Wall Panel.

Prices do not include glass for sash or skylights.

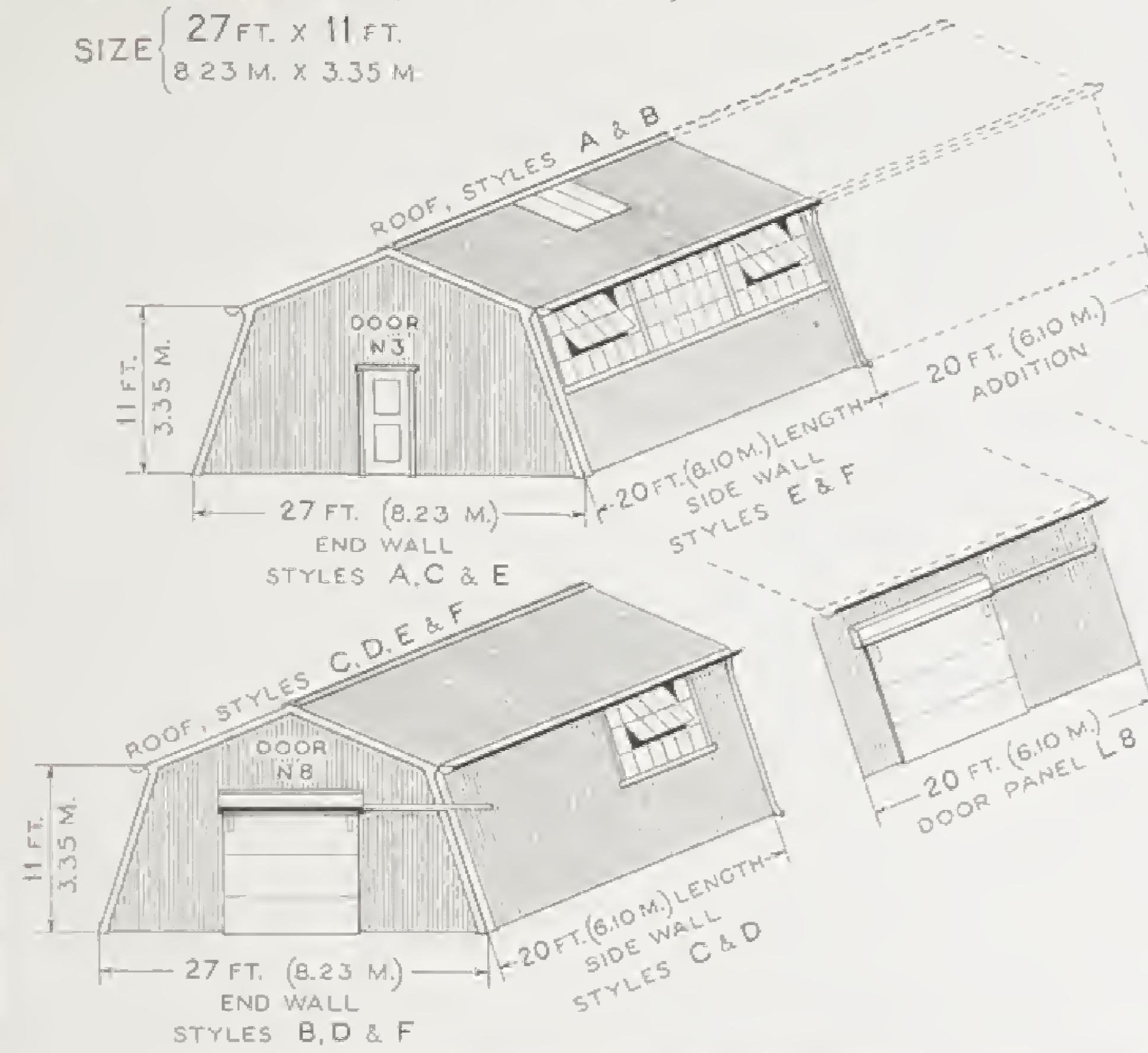
When *galvanized* sheets are desired for the roof, side walls and end walls, add 3 per cent. to the price of the building.

All prices in U. S. currency, f. o. b. cars or f. a. s. New York.



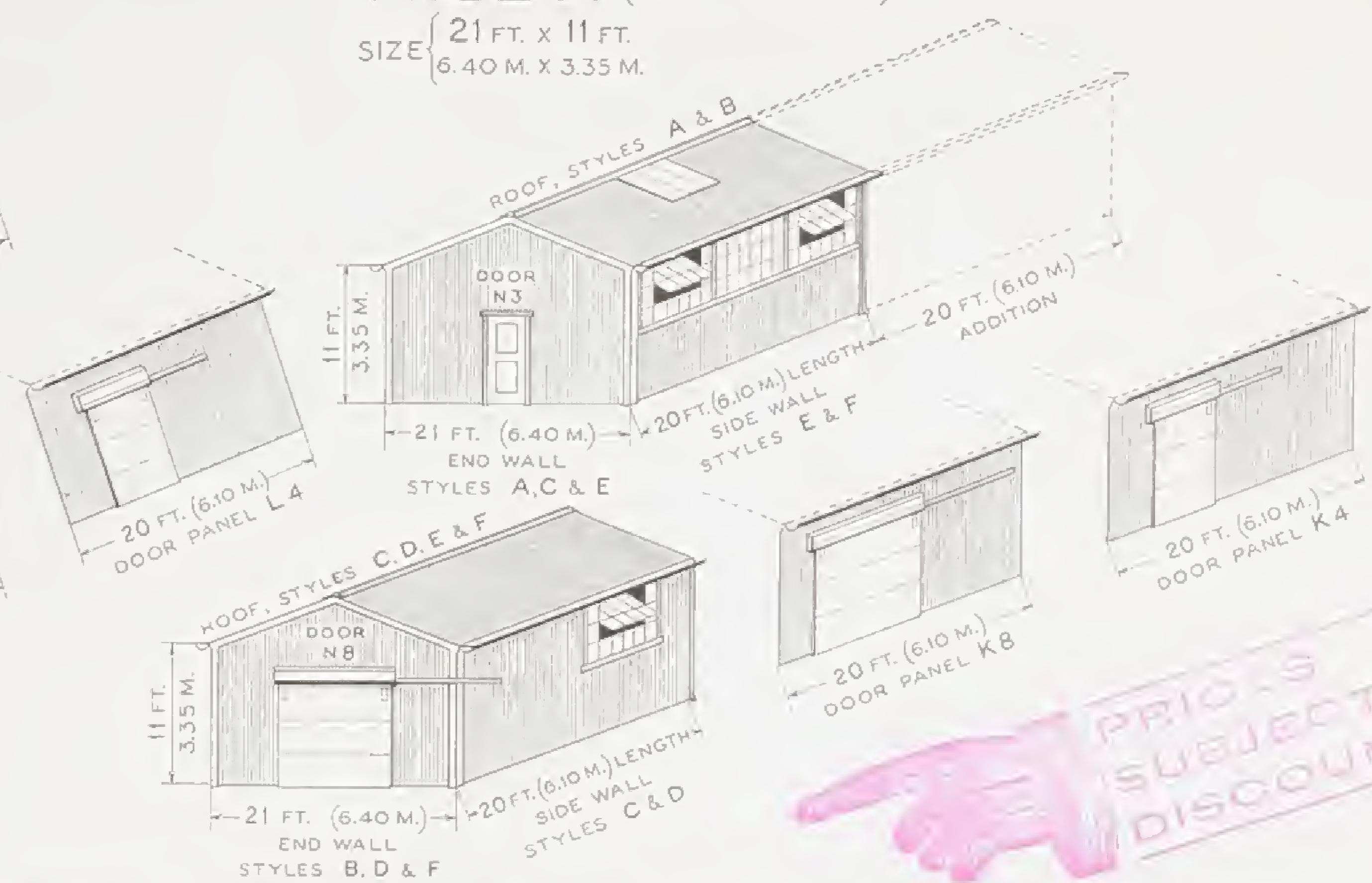
### TYPE 2S1 (SLOPING SIDES)

SIZE { 27 FT. X 11 FT.  
8.23 M. X 3.35 M.



### TYPE 2V1 (VERTICAL SIDES)

SIZE { 21 FT. X 11 FT.  
6.40 M. X 3.35 M.



PRIO-S  
SUBJECT TO  
DISCOUNT

## PRICE LIST OF MILLIKEN BUILDINGS

TYPE	STYLE	DESCRIPTION			LENGTH OF BUILDING					ADD FOR EACH SIDE DOOR PANEL	
		ROOF	END WALLS	SIDE WALLS	20 FT. 6.10 M.	40 FT. 12.20 M.	60 FT. 18.29 M.	80 FT. 24.39 M.	100 FT. 30.49 M.	ADD FOR EACH 20 FT LENGTH	DOOR L8 OR K8 L4 OR K4
2S1	A	SKYLIGHT	DOOR N3	CLOSED	\$ 1190.	\$ 1790.	\$ 2390.	\$ 2990.	\$ 3590.	\$ 600.	\$ 170. \$120.
	B	SKYLIGHT	DOOR N8	CLOSED	1500.	2100.	2700.	3300.	4000.	600.	170. 120.
	C	CLOSED	DOOR N3	SINGLE SASH	1200.	1810.	2420.	3030.	3640.	610.	150. 100.
	D	CLOSED	DOOR N8	SINGLE SASH	1510.	2120.	2730.	3340.	3950.	610.	150. 100.
	E	CLOSED	DOOR N3	CONT. SASH	1280.	1970.	2660.	3350.	4040.	690.	120. 70.
	F	CLOSED	DOOR N8	CONT. SASH	1590.	2280.	2970.	3660.	4350.	690.	120. 70.
2V1	A	SKYLIGHT	DOOR N3	CLOSED	\$ 1150.	\$ 1750.	\$ 2350.	\$ 2950.	\$ 3550.	\$ 600.	\$ 170. \$120.
	B	SKYLIGHT	DOOR N8	CLOSED	1460.	2060.	2660.	3260.	3860.	600.	170. 120.
	C	CLOSED	DOOR N3	SINGLE SASH	1160.	1770.	2380.	2990.	3600.	610.	150. 100.
	D	CLOSED	DOOR N8	SINGLE SASH	1470.	2080.	2690.	3300.	3910.	610.	150. 100.
	E	CLOSED	DOOR N3	CONT. SASH	1240.	1930.	2620.	3310.	4000.	690.	120. 70.
	F	CLOSED	DOOR N8	CONT. SASH	1550.	2240.	2930.	3620.	4310.	690.	120. 70.



## MILLIKEN BUILDINGS—TYPES 4S1 AND 4V1

Dimensions given in feet (Ft.) and meters (M.)

### SPECIFICATIONS

#### Structural Steel Work

Structural steel frame work of standardized Truss Unit System throughout. All connections bolted. Diagonal bracing rods furnished on the basis of bracing both end bays and each fourth interior bay. All work to have one shop coat of paint.

TYPE 4S1 buildings have columns of standard Uans, furnished with set of column anchor bolts in addition to set of lag screws, making use of concrete or timber foundations optional.

TYPE 4V1 buildings have vertical channel base columns and column anchor bolts for concrete foundations.

#### Finishing Work

All buildings furnished with pointed corrugated steel roof, side walls and end walls, galvanized steel gutters, leaders, ridge pull, eave flashing, gable flashing and corner trim. Full complement of clips, bolts and washers for fastening in accordance with prescribed details. The different Styles of buildings shown on opposite page are based on various arrangements of end wall doors, side and skylights as described in the next columns.

#### STYLE A

Roof—2.000 ft. 16 gauge 6 ft. 6 in. by 3 ft. 6 in.  
every 20 feet in length of building.  
Each End Wall—1 steel sliding door 38 ft. 0 in.  
by 7 ft. 11 in. (no glass).  
Each Side Wall—1.000 ft. 16 gauge 300 ft.

#### STYLE B

Roof—2.000 ft. 16 gauge 5 ft. 2 in. by 3 ft. 6 in.  
every 20 feet in length of building.  
Each End Wall—1 steel sliding door 38 ft. 0 in.  
by 7 ft. 11 in. (no glass).  
Each Side Wall—1.000 ft. 16 gauge 300 ft.

#### STYLE C

Roof—2.000 ft. 16 gauge 5 ft. 2 in.  
Each End Wall—1 steel sliding door 38 ft. 0 in.  
by 7 ft. 11 in. (no glass).  
Each Side Wall—1 steel ventilation panel 6 ft.  
by 10 ft. of 16 ft. 6 in. every 20 feet in length  
of building.

#### STYLE D

Roof—2.000 ft. 16 gauge 5 ft. 2 in.  
Each End Wall—1 steel sliding door 38 ft. 0 in.  
by 7 ft. 11 in. (no glass).  
Each Side Wall—1 steel ventilation panel 6 ft.  
by 10 ft. of 16 ft. 6 in. every 20 feet in length  
of building.

#### STYLE E

Roof—2.000 ft. 16 gauge 5 ft. 2 in.  
Each End Wall—1 steel sliding door 38 ft. 0 in.  
by 7 ft. 11 in. (no glass).  
Each Side Wall—1.000 ft. 16 gauge 300 ft.

#### STYLE F

Roof—2.000 ft. 16 gauge 5 ft. 2 in.  
Each End Wall—1 steel sliding door 38 ft. 0 in.  
by 7 ft. 11 in. (no glass).  
Each Side Wall—1.000 ft. 16 gauge 300 ft.

### List Prices

List prices for various lengths of buildings given on opposite page are in each case for a complete building of the Type, Style and Length shown. Buildings of additional length, in multiples of 20 feet, are furnished at prices found by adding for each additional 20 feet in length the amount given in the column "Add for each 20-foot Length."

The buildings as priced do not include Side Wall Doors. When such doors are required, add the price of each as given in the last two columns. These doors will be of the sliding type, similar in construction to the End Wall Doors and of two sizes:

L4 or K4—4 ft. 11 in. wide by 8 ft. 6 in. high.

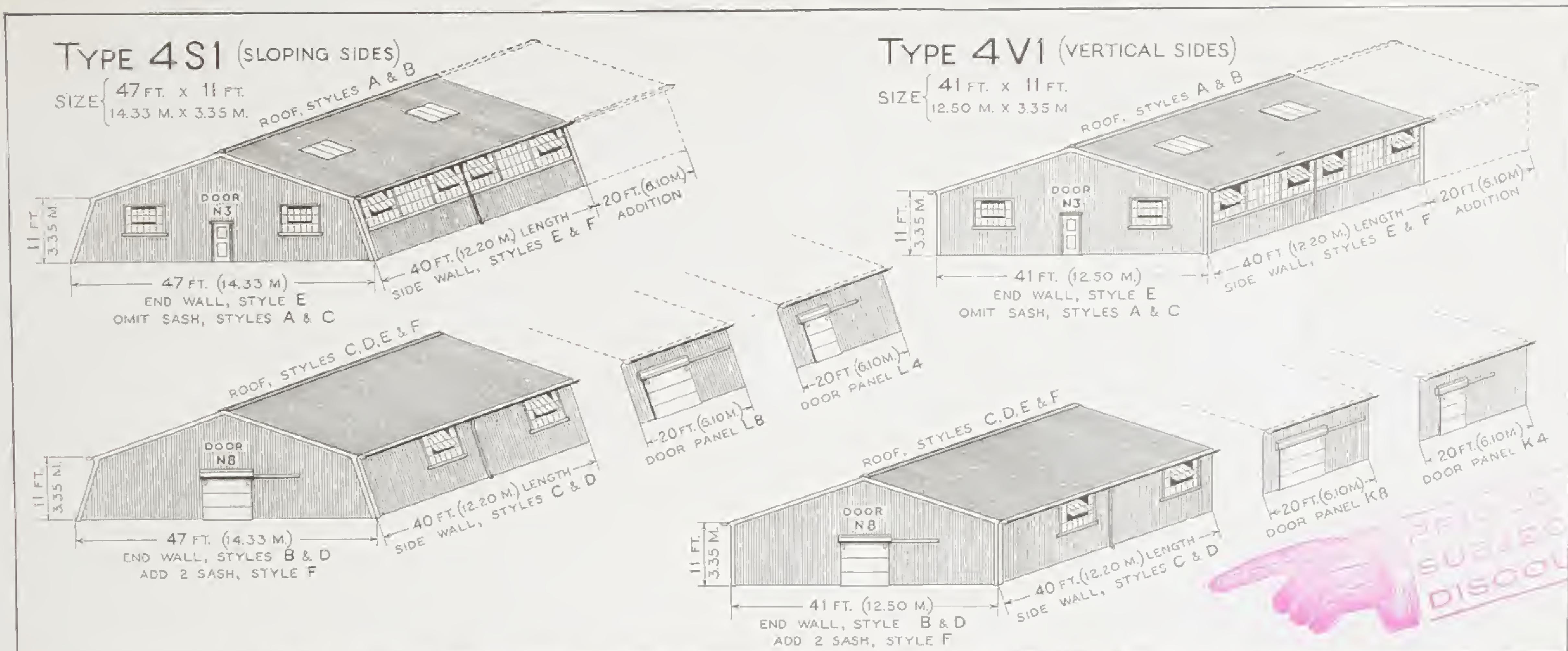
L8 or K8—8 ft. 9 in. wide by 8 ft. 6 in. high.

Each Side Wall Door is included in a 20-foot Side Door Panel for one side of building, and the price given is the extra cost of this panel over that of the standard 20-foot Side Wall Panel.

Prices do not include glass for such or skylights.

When galvanized sheets are desired for the roof, side walls and end walls, add 8 per cent. to the price of the building.

All prices in U. S. currency, F. C. B. or F. A. S. New York.



## PRICE LIST OF MILLIKEN BUILDINGS

TYPE	STYLE	DESCRIPTION			LENGTH OF BUILDING					ADD FOR EACH SIDE DOOR PANEL	
		ROOF	END WALLS	SIDE WALLS	40 FT. 12.20 M.	80 FT. 24.39 M.	120 FT. 36.58 M.	160 FT. 48.78 M.	200 FT. 60.97 M.	ADD FOR EACH 20 FT. LENGTH	DOOR L8 OR K8 L4 OR K4
4S1	A	SKYLIGHT	DOOR N3	CLOSED	\$ 2660.	\$ 4320.	\$ 5980.	\$ 7640.	\$ 9300.	\$ 830.	\$170. \$120.
	B	SKYLIGHT	DOOR N8	CLOSED	2970.	4630.	6290.	7950.	9610.	830.	170. 120.
	C	CLOSED	DOOR N3	SINGLE SASH	2690.	4380.	6070.	7760.	9450.	845.	150. 100.
	D	CLOSED	DOOR N8	SINGLE SASH	3000.	4690.	6380.	8070.	9760.	845.	150. 100.
	E	CLOSED	DOOR N3	SASH	2950.	4790.	6630.	8470.	10310.	920.	120. 70.
	F	CLOSED	DOOR N8	SASH	3260.	5100.	6940.	8780.	10620.	920.	120. 70.
4V1	A	SKYLIGHT	DOOR N3	CLOSED	\$ 2640.	\$ 4300.	\$ 5960.	\$ 7620.	\$ 9280.	\$ 830.	\$170. \$120.
	B	SKYLIGHT	DOOR N8	CLOSED	2950.	4610.	6270.	7930.	9590.	830.	170. 120.
	C	CLOSED	DOOR N3	SINGLE SASH	2660.	4340.	6020.	7700.	9380.	840.	150. 100.
	D	CLOSED	DOOR N8	SINGLE SASH	2970.	4650.	6330.	8010.	9690.	840.	150. 100.
	E	CLOSED	DOOR N3	SASH	2930.	4770.	6610.	8450.	10290.	920.	120. 70.
	F	CLOSED	DOOR N8	SASH	3230.	5070.	6910.	8750.	10590.	920.	120. 70.



## MILLIKEN BUILDINGS—TYPES 6S1 AND 6V1

Dimensions given in feet (Ft.) and meters (M.)

### SPECIFICATIONS

#### Structural Steel Work

Structural steel frame work of standardized Truss Unit System throughout. All connections bolted. Diagonal bracing rods furnished on the basis of bracing both end bays and each fourth interior bay. All work to have one shop coat of paint.

TYPE 6S1 buildings have columns of standard Units, furnished with set of column anchor bolts in addition to set of lag screws, making use of concrete or timber foundations optional.

TYPE 6V1 buildings have vertical channel bar columns and column anchor bolts for concrete foundations.

#### Finishing Work

All buildings furnished with *painted* corrugated steel roof, side walls and end walls; *galvanized* steel gutters, leaders, ridge roll, eave flashing, gable flashing and corner trim; full complement of clips, bolts and washers for fastening in accordance with prescribed details. The different Styles of buildings shown on opposite page are based on various arrangements of *end wall doors, sash and skylights* as described in the next column.

##### STYLE A

**Roof**—4 steel skylights 5 ft. 2 in. by 5 ft. 3 in. every 20 feet in length of building.  
**Each End Wall**—1 steel hinged door N3, 3 ft. by 7 ft. (no sash).  
**Each Side Wall**—Closed without sash.

##### STYLE B

**Roof**—4 steel skylights 5 ft. 2 in. by 5 ft. 3 in. every 20 feet in length of building.  
**Each End Wall**—1 steel sliding door N8, 8 ft. 9 in. by 8 ft. 6 in. (no sash).  
**Each Side Wall**—Closed without sash.

##### STYLE C

**Roof**—Closed without skylights.  
**Each End Wall**—1 steel hinged door N3, 3 ft. by 7 ft.; and 2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in.  
**Each Side Wall**—1 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet in length of building.

##### STYLE D

**Roof**—Closed without skylights.  
**Each End Wall**—1 steel sliding door N8, 8 ft. 9 in. by 8 ft. 6 in.; and 2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in.  
**Each Side Wall**—1 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet in length of building.

##### STYLE E

**Roof**—Closed without skylights.  
**Each End Wall**—1 steel hinged door N3, 3 ft. by 7 ft.; and 4 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in.  
**Each Side Wall**—Continuous steel ventilating and stationary sash 4 ft. 8 in. high.

##### STYLE F

**Roof**—Closed without skylights.  
**Each End Wall**—1 steel sliding door N8, 8 ft. 9 in. by 8 ft. 6 in.; and 4 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in.  
**Each Side Wall**—Continuous steel ventilating and stationary sash 4 ft. 8 in. high.

#### List Prices

List prices for various lengths of buildings given on opposite page are in each case for a complete building of the Type, Style and Length shown. Buildings of additional length, in multiples of 20 feet, are furnished at prices found by adding for each additional 20 feet in length the amount given in the column "Add for each 20-foot Length."

The buildings as priced do not include Side Wall Doors. When such doors are required, add the price of each as given in the last two columns. These doors will be of the sliding type, similar in construction to the End Wall Doors and of two sizes:

L4 or K4—4 ft. 11 in. wide by 8 ft. 6 in. high.

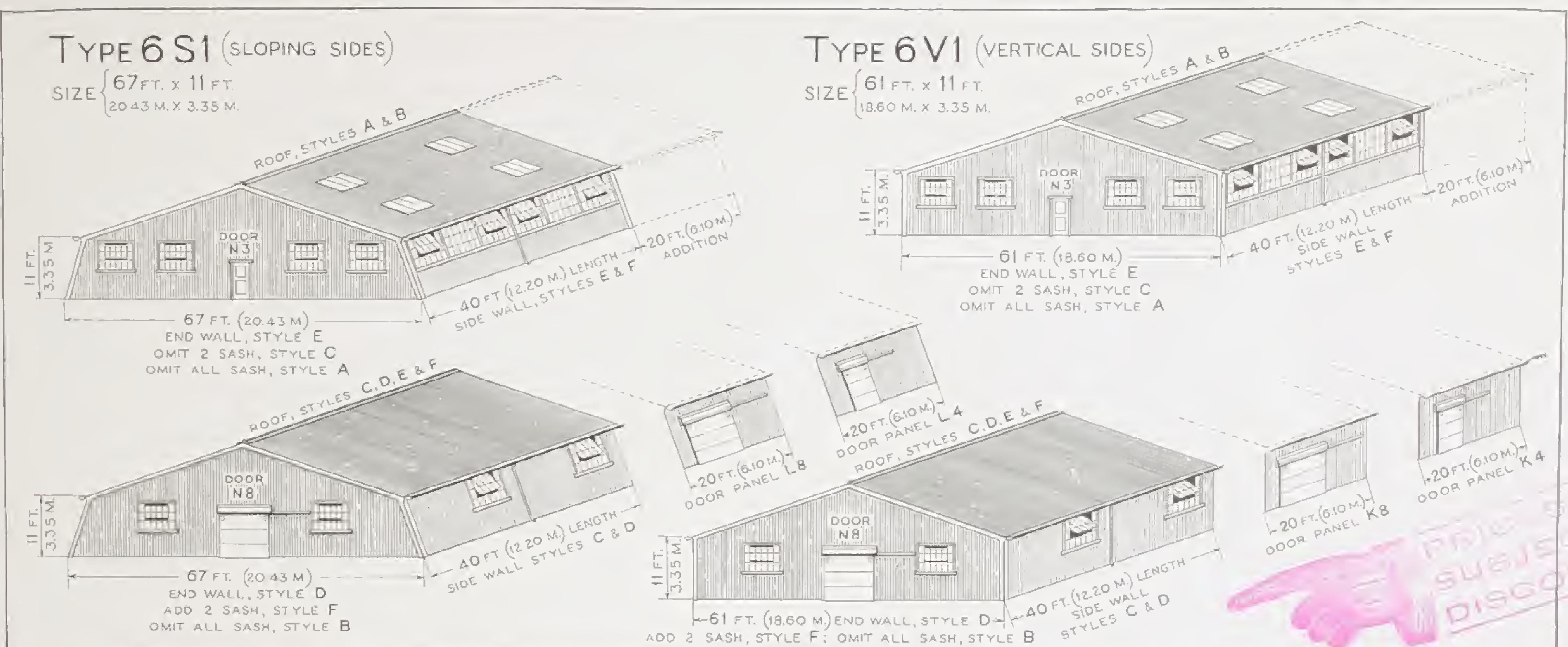
L8 or K8—8 ft. 9 in. wide by 8 ft. 6 in. high.

Each Side Wall Door is included in a 20-foot Side Door Panel for one side of building, and the price given is the extra cost of this panel over that of the standard 20-foot Side Wall Panel.

Prices do not include glass for sash or skylights.

When *galvanized* sheets are desired for the roof, side walls and end walls, add 8 per cent. to the price of the building.

All prices in U. S. currency, f.o.b. cars or f.a.s. New York.



## PRICE LIST OF MILLIKEN BUILDINGS

TYPE	STYLE	DESCRIPTION			LENGTH OF BUILDING						ADD FOR EACH SIDE DOOR PANEL
		ROOF	END WALLS	SIDE WALLS	40 FT. 12.20 M.	80 FT. 24.39 M.	120 FT. 36.58 M.	160 FT. 48.78 M.	200 FT. 60.97 M.	ADD FOR EACH 20 FT. LENGTH	
6S1	A	SKYLIGHT	DOOR N3	CLOSED	\$ 3850.	\$ 6230.	\$ 8610.	\$ 10990.	\$ 13370.	\$ 1190.	\$ 170. \$120.
	B	SKYLIGHT	DOOR N8	CLOSED	4160.	6540.	8920.	11300.	13680.	1190.	170. 120.
	C	CLOSED	DOOR N3 SASH	SINGLE SASH	3900.	6220.	8540.	10860.	13180.	1160.	150. 100.
	D	CLOSED	DOOR N8 SASH	SINGLE SASH	4210.	6530.	8850.	11170.	13490.	1160.	150. 100.
	E	CLOSED	DOOR N3 SASH	CONT. SASH	4170.	6640.	9110.	11580.	14050.	1235.	120. 70.
	F	CLOSED	DOOR N8 SASH	CONT. SASH	4480.	6950.	9420.	11890.	14360.	1235.	120. 70.
6VI	A	SKYLIGHT	DOOR N3	CLOSED	\$ 3810.	\$ 6170.	\$ 8530.	\$ 10890.	\$ 13250.	\$ 1180.	\$ 170. \$120.
	B	SKYLIGHT	DOOR N8	CLOSED	4120.	6480.	8840.	11200.	13560.	1180.	170. 120.
	C	CLOSED	DOOR N3 SASH	SINGLE SASH	3870.	6170.	8470.	10770.	13070.	1150.	150. 100.
	D	CLOSED	DOOR N8 SASH	SINGLE SASH	4180.	6480.	8780.	11080.	13380.	1150.	150. 100.
	E	CLOSED	DOOR N3 SASH	CONT. SASH	4130.	6590.	9050.	11510.	13970.	1230.	120. 70.
	F	CLOSED	DOOR N8 SASH	CONT. SASH	4440.	6900.	9360.	11820.	14280.	1230.	120. 70.

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B  
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## MILLIKEN BUILDINGS—TYPES 2S2 AND 2V2

Dimensions given in feet (Ft.) and meters (M.)

### SPECIFICATIONS

#### Structural Steel Work

Structural steel frame work of standardized Truss Unit System throughout. All connections bolted. Diagonal bracing rods furnished on the basis of bracing both end bays and each fourth interior bay. All work to have one shop coat of paint.

TYPE 2S2 buildings have columns of standard Units, furnished with set of column anchor bolts in addition to set of lag screws, making use of concrete or timber foundations optional.

TYPE 2V2 buildings have vertical channel bar columns and column anchor bolts for concrete foundations.

#### Finishing Work

All buildings furnished with *painted* corrugated steel roof, side walls and end walls; *galvanized* steel gutters, leaders, ridge cap, eave flashing, gable flashing and corner trim; full complement of clips, bolts and washers for fastening in accordance with prescribed details. The different Styles of buildings shown on opposite page are based on various arrangements of end wall doors, sash and skylights as described in the next column.

#### STYLE A

Roof—2 steel skylights 5 ft. 2 in. by 5 ft. 8 in. every 20 feet in length of building.  
Each End Wall—1 steel hinged door NS, 8 ft. 0 in. by 7 ft. (no sash).  
Each Side Wall—Closed without sash

#### STYLE B

Roof—2 steel skylights 5 ft. 2 in. by 5 ft. 8 in. every 20 feet in length of building.  
Each End Wall—1 steel sliding door NS, 8 ft. 0 in. by 8 ft. 4 in. (no sash).  
Each Side Wall—Closed without sash

#### STYLE C

Roof—Closed without skylights.  
Each End Wall—1 steel hinged door NS, 1 ft. 0 in. by 7 ft. (no sash).  
Each Side Wall—2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet in length of building.

#### STYLE D

Roof—Closed without skylights.  
Each End Wall—1 steel sliding door NS, 8 ft. 0 in. by 8 ft. 4 in. (no sash).  
Each Side Wall—2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet in length of building

#### STYLE E

Roof—Closed without skylights.  
Each End Wall—1 steel hinged door NS, 8 ft. 0 in. by 7 ft. (no sash).  
Each Side Wall—1 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet, and a continuous line of steel ventilating and star-shaped sash 1 ft. 4 in. high

#### STYLE F

Roof—Closed without skylights.  
Each End Wall—1 steel sliding door NS, 8 ft. 0 in. by 8 ft. 4 in. (no sash).  
Each Side Wall—1 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet, and a continuous line of steel ventilating and star-shaped sash 1 ft. 4 in. high

#### List Prices

List prices for various lengths of buildings given on opposite page are in each case for a complete building of the Type, Style and Length shown. Buildings of additional length, in multiples of 20 feet, are furnished at prices found by adding for each additional 20 feet in length the amount given in the column "Add for each 20-foot Length."

The buildings as priced do not include Side Wall Doors. When such doors are required, add the price of each as given in the last two columns. These doors will be of the sliding type, similar in construction to the End Wall Doors and of two sizes:

L4 or K4—4 ft. 11 in. wide by 8 ft. 6 in. high.

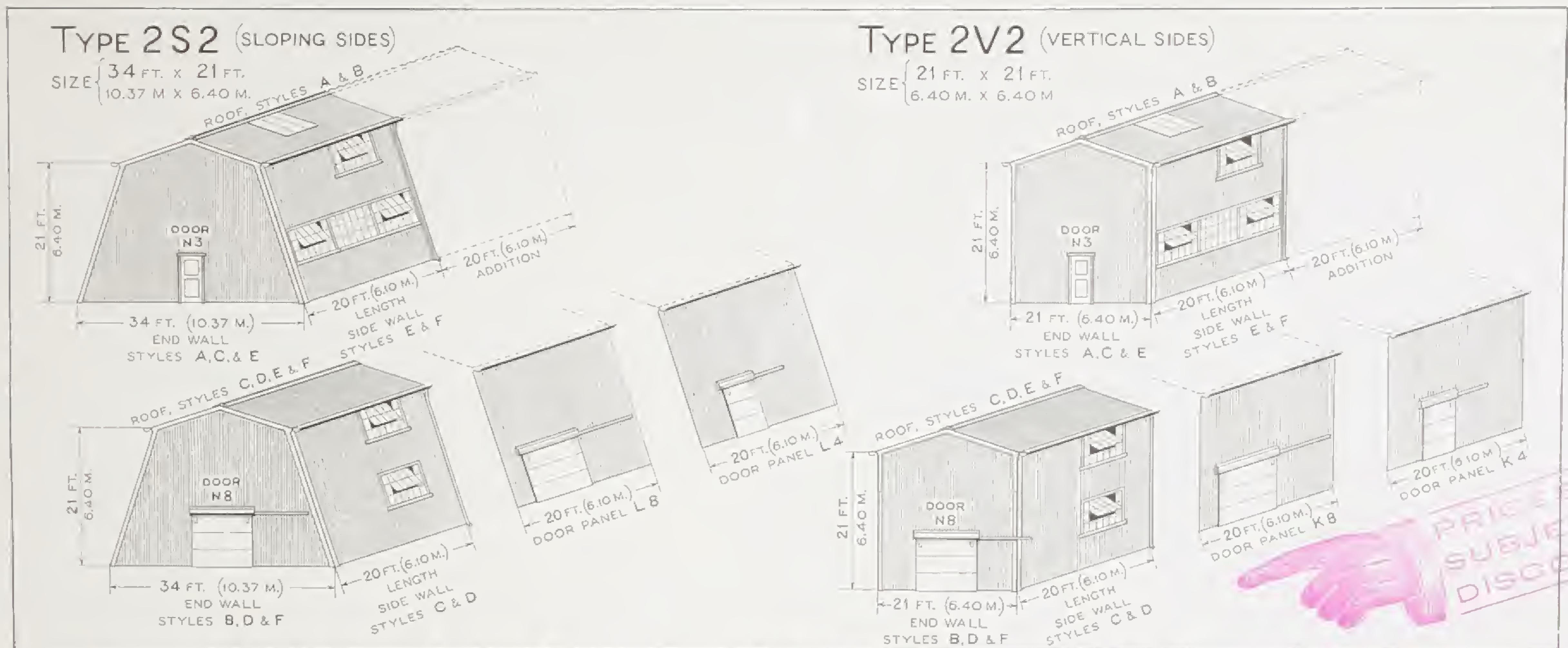
L8 or K8—8 ft. 9 in. wide by 8 ft. 6 in. high.

Each Side Wall Door is included in a 20-foot Side Wall Panel for one side of building, and the price given is the extra cost of this panel over that of the standard 20-foot Side Wall Panel.

Prices do not include glass for sash or skylights.

When *galvanized* sheets are desired for the roof, side walls and end walls, add 3 per cent, to the price of the building.

All prices in U. S. currency, f.o.b. cars or f.a.s. New York.



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15

## PRICE LIST OF MILLIKEN BUILDINGS

TYPE	STYLE	DESCRIPTION			LENGTH OF BUILDING					ADD FOR EACH SIDE DOOR PANEL	
		ROOF	END WALLS	SIDE WALLS	20 FT. 6.10 M.	40 FT. 12.20 M.	60 FT. 18.29 M.	80 FT. 24.39 M.	100 FT. 30.49 M.	ADD FOR EACH 20 FT. LENGTH	DOOR L8 OR K8 L4 OR K4
2S2	A	SKYLIGHT	DOOR N3	CLOSED	\$ 1910.	\$ 2820.	\$ 3730.	\$ 4640.	\$ 5550.	\$ 910.	\$170. \$120.
	B	SKYLIGHT	DOOR N8	CLOSED	2210.	3120.	4030.	4940.	5850.	910.	170. 120.
	C	CLOSED	DOOR N3	SINGLE SASH SINGLE SASH	1980.	2960.	3940.	4920.	5900.	980.	150. 100.
	D	CLOSED	DOOR N8	SINGLE SASH SINGLE SASH	2280.	3260.	4240.	5220.	6200.	980.	150. 100.
	E	CLOSED	DOOR N3	SINGLE SASH CONT. SASH	2050.	3110.	4170.	5230.	6290.	1060.	120. 70.
	F	CLOSED	DOOR N8	SINGLE SASH CONT. SASH	2360.	3420.	4480.	5540.	6600.	1060.	120. 70.
2V2	A	SKYLIGHT	DOOR N3	CLOSED	\$ 1700.	\$ 2570.	\$ 3440.	\$ 4310.	\$ 5180.	\$ 870.	\$170. \$120.
	B	SKYLIGHT	DOOR N8	CLOSED	2010.	2880.	3750.	4620.	5490.	870.	170. 120.
	C	CLOSED	DOOR N3	SINGLE SASH SINGLE SASH	1770.	2710.	3650.	4590.	5530.	940.	150. 100.
	D	CLOSED	DOOR N8	SINGLE SASH SINGLE SASH	2080.	3020.	3960.	4900.	5840.	940.	150. 100.
	E	CLOSED	DOOR N3	SINGLE SASH CONT. SASH	1850.	2870.	3890.	4910.	5930.	1020.	120. 70.
	F	CLOSED	DOOR N8	SINGLE SASH CONT. SASH	2160.	3180.	4200.	5220.	6240.	1020.	120. 70.



## MILLIKEN BUILDINGS—TYPES 4S2 AND 4V2

Dimensions given in feet (Ft.) and meters (M.)

### SPECIFICATIONS

#### Structural Steel Work

Structural steel frame work of standardized Truss Unit System throughout. All connections bolted. Diagonal bracing rods furnished on the basis of bracing both end bays and each fourth interior bay. All work to have one shop coat of paint.

TYPE 4S2 buildings have columns of standard units, furnished with set of column anchor bolts in addition to set of lag screws, making use of concrete or timber foundations optional.

TYPE 4V2 buildings have vertical channel bar columns and column anchor bolts for concrete foundations.

#### Finishing Work

All buildings furnished with *painted* corrugated steel roof, side walls and end walls; galvanized steel gutters, leaders, ridge roll, eave flashing, gable flashing and corner trim; full complement of clips, bolts and washers for fastening in accordance with prescribed details. The different styles of buildings shown on opposite page are based on various arrangements of end wall doors, sash and skylights as described in the next column.

#### STYLE A

Roof—2 steel skylights 5 ft. 2 in. by 5 ft. 3 in. every 20 feet in length of building.  
Each End Wall—1 steel hinged door NS. 3 ft. 9 in. 5 ft. (no sash).  
Each Side Wall—Closed without sash.

#### STYLE B

Roof—2 steel skylights 5 ft. 2 in. by 5 ft. 3 in. every 20 feet in length of building.  
Each End Wall—1 steel sliding door NS. 3 ft. 9 in. 8 ft. 9 in. (no sash).  
Each Side Wall—Closed without sash.

#### STYLE C

Roof—Closed without skylights.  
Each End Wall—1 steel hinged door NS. 2 ft. 10 in. 7 ft. (no sash).  
Each Side Wall—2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet in length of building.

#### STYLE D

Roof—Closed without skylights.  
Each End Wall—1 steel sliding door NS. 8 ft. 2 in. by 6 ft. 6 in. (no sash).  
Each Side Wall—2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet in length of building.

#### STYLE E

Roof—Closed without skylights.  
Each End Wall—1 steel hinged door NS. 3 ft. 9 in. by 7 ft. and 2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in.  
Each Side Wall—1 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet, and a continuous line of steel ventilating and sash sash 1 ft. 8 in. high.

#### STYLE F

Roof—Closed without skylights.  
Each End Wall—1 steel sliding door NS. 4 ft. 2 in. by 8 ft. 8 in. and 2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in.  
Each Side Wall—1 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet, and a continuous line of steel ventilating and sash sash 1 ft. 8 in. high.

### List Prices

List prices for various lengths of buildings given on opposite page are in each case for a complete building of the Type, Style and Length shown. Buildings of additional length, in multiples of 20 feet, are furnished at prices found by adding for each additional 20 feet in length the amount given in the column "Add for each 20-foot Length."

The buildings as priced do not include Side Wall Doors. When such doors are required, add the price of each as given in the last two columns. These doors will be of the sliding type, similar in construction to the End Wall Doors and of two sizes:

L4 or K4—4 ft. 11 in. wide by 8 ft. 6 in. high.

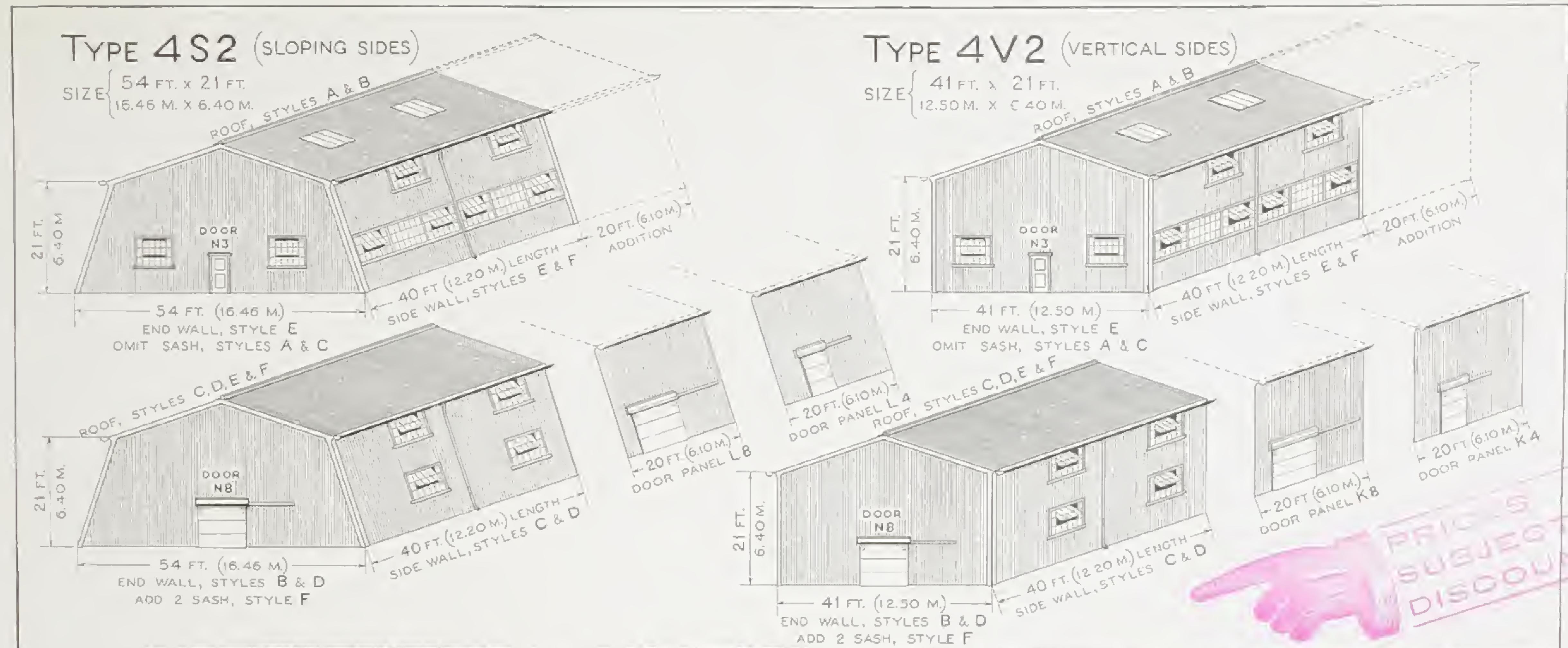
L8 or K8—8 ft. 9 in. wide by 8 ft. 6 in. high.

Each Side Wall Door is included in a 20-foot Side Wall Panel for one side of building, and the price given is the extra cost of this panel over that of the standard 20-foot Side Wall Panel.

Prices do not include glass for sash or skylights.

When galvanized sheets are desired for the roof, side walls and end walls, add 3 per cent. to the price of the building.

All prices in U. S. currency, C. o. b., cars or C. & S., New York.



## PRICE LIST OF MILLIKEN BUILDINGS

TYPE	STYLE	DESCRIPTION			LENGTH OF BUILDING						ADD FOR EACH SIDE DOOR PANEL
		ROOF	END WALLS	SIDE WALLS	40 FT. 12.20 M.	80 FT. 24.39 M.	120 FT. 36.58 M.	160 FT. 48.78 M.	200 FT. 60.97 M.	ADD FOR EACH 20FT.LENGTH	
4S2	A	SKYLIGHT	DOOR N3	CLOSED	\$ 3940.	\$ 6230.	\$ 8520.	\$ 10810.	\$ 13100.	\$ 1145.	\$ 170. \$120.
	B	SKYLIGHT	DOOR N8	CLOSED	4250.	6540.	8830.	11120.	13410.	1145.	170. 120.
	C	CLOSED	DOOR N3	SINGLE SASH SINGLE SASH	4080.	6510.	8940.	11370.	13800.	1215.	150. 100.
	D	CLOSED	DOOR N8	SINGLE SASH SINGLE SASH	4390.	6820.	9250.	11680.	14110.	1215.	150. 100.
	E	CLOSED	DOOR N3	SINGLE SASH SASH	4350.	6930.	9510.	12090.	14670.	1290.	120. 70.
	F	CLOSED	DOOR N8	SINGLE SASH SASH	4660.	7240.	9820.	12400.	14980.	1290.	120. 70.
4V2	A	SKYLIGHT	DOOR N3	CLOSED	\$ 3700.	\$ 5900.	\$ 8100.	\$ 10300.	\$ 12500.	\$ 1100.	\$ 170. \$120
	B	SKYLIGHT	DOOR N8	CLOSED	4000.	6200.	8400.	10600.	12800.	1100.	170. 120.
	C	CLOSED	DOOR N3	SINGLE SASH SINGLE SASH	3840.	6180.	8520.	10860.	13200.	1170.	150. 100.
	D	CLOSED	DOOR N8	SINGLE SASH SINGLE SASH	4140.	6480.	8820.	11160.	13500.	1170.	150. 100.
	E	CLOSED	DOOR N3	SINGLE SASH SASH	4110.	6600.	9090.	11580.	14070.	1245.	120. 70.
	F	CLOSED	DOOR N8	SINGLE SASH SASH	4420.	6910.	9400.	11890.	14380.	1245.	120. 70.

3  
75



## MILLIKEN BUILDINGS—TYPES 6S2 AND 6V2

Dimensions given in feet (Ft.) and meters (M.)

### SPECIFICATIONS

#### Structural Steel Work

Structural steel frame work of standardized Truss Unit System throughout. All connections bolted. Diagonal bracing rods furnished on the basis of bracing both end bays and each fourth interior bay. All work to have one shop coat of paint.

TYPE 6S2 buildings have columns of standard Units, furnished with set of column anchor bolts in addition to set of lag screws, making use of concrete or timber foundations optional.

TYPE 6V2 buildings have vertical channel bar columns and column anchor bolts for concrete foundations.

#### Finishing Work

All buildings furnished with *painted* corrugated steel roof, side walls and end walls; *galvanized* steel gutters, leaders, ridge roll, eave flashing, gable flashing and corner trim; full complement of clips, bolts and washers for fastening in accordance with prescribed details. The different Styles of buildings shown on opposite page are based on various arrangements of *end wall doors*, *sash* and *skylights* as described in the next column:

#### STYLE A

**Roof**—4 steel skylights 5 ft. 2 in. by 5 ft. 3 in. every 20 feet in length of building.  
**Each End Wall**—1 steel hinged door N3, 3 ft. by 7 ft. (no sash).  
**Each Side Wall**—Closed without sash.

#### STYLE B

**Roof**—4 steel skylights 5 ft. 2 in. by 5 ft. 3 in. every 20 feet in length of building.  
**Each End Wall**—1 steel sliding door N8, 8 ft. 9 in. by 8 ft. 6 in. (no sash).  
**Each Side Wall**—Closed without sash.

#### STYLE C

**Roof**—Closed without skylights.  
**Each End Wall**—1 steel hinged door N3, 3 ft. by 7 ft.; and 2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in.  
**Each Side Wall**—2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet in length of building.

#### STYLE D

**Roof**—Closed without skylights.  
**Each End Wall**—1 steel sliding door N8, 8 ft. 9 in. by 8 ft. 6 in.; and 2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in.  
**Each Side Wall**—2 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet in length of building.

#### STYLE E

**Roof**—Closed without skylights.  
**Each End Wall**—1 steel hinged door N3, 3 ft. by 7 ft.; and 4 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in.  
**Each Side Wall**—1 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet; and a continuous line of steel ventilating and stationary sash 4 ft. 8 in. high.

#### STYLE F

**Roof**—Closed without skylights.  
**Each End Wall**—1 steel sliding door N8, 8 ft. 9 in. by 8 ft. 6 in.; and 4 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in.  
**Each Side Wall**—1 steel ventilating sash 6 ft. 2 in. by 4 ft. 8 in. every 20 feet; and a continuous line of steel ventilating and stationary sash 4 ft. 8 in. high.

### List Prices

List prices for various lengths of buildings given on opposite page are in each case for a complete building of the Type, Style and Length shown. Buildings of additional length, in multiples of 20 feet, are furnished at prices found by adding for each additional 20 feet in length the amount given in the column "Add for each 20-foot Length."

The buildings as priced do not include Side Wall Doors. When such doors are required, add the price of each as given in the last two columns. These doors will be of the sliding type, similar in construction to the End Wall Doors and of two sizes:

L4 or K4—4 ft. 11 in. wide by 8 ft. 6 in. high.

L8 or K8—8 ft. 9 in. wide by 8 ft. 6 in. high.

Each Side Wall Door is included in a 20-foot Side Door Panel for one side of building, and the price given is the extra cost of this panel over that of the standard 20-foot Side Wall Panel.

Prices do not include glass for sash or skylights.

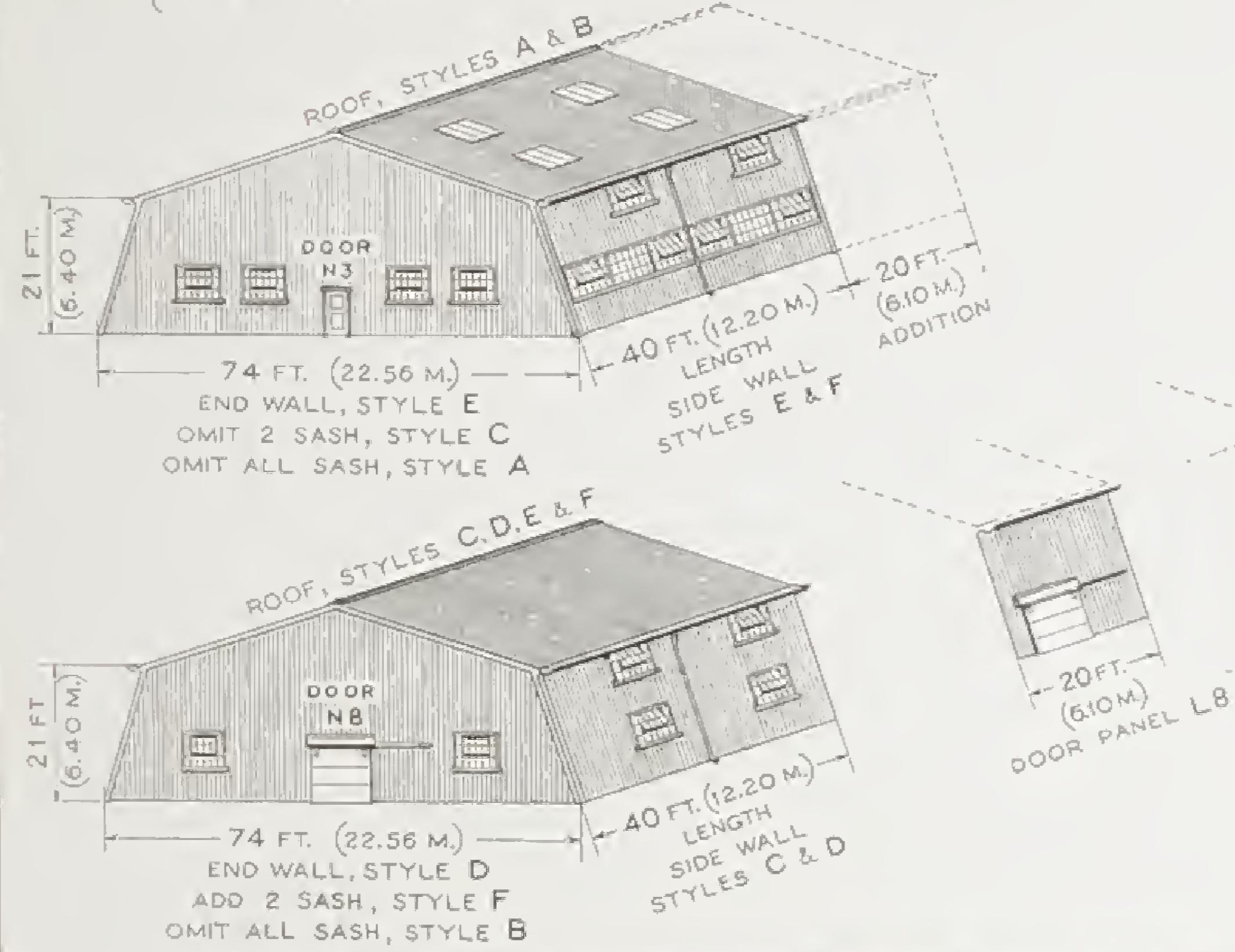
When *galvanized* sheets are desired for the roof, side walls and end walls, add 8 per cent. to the price of the building.

All prices in U. S. currency, f.o.b. cars or f.a.s. New York.



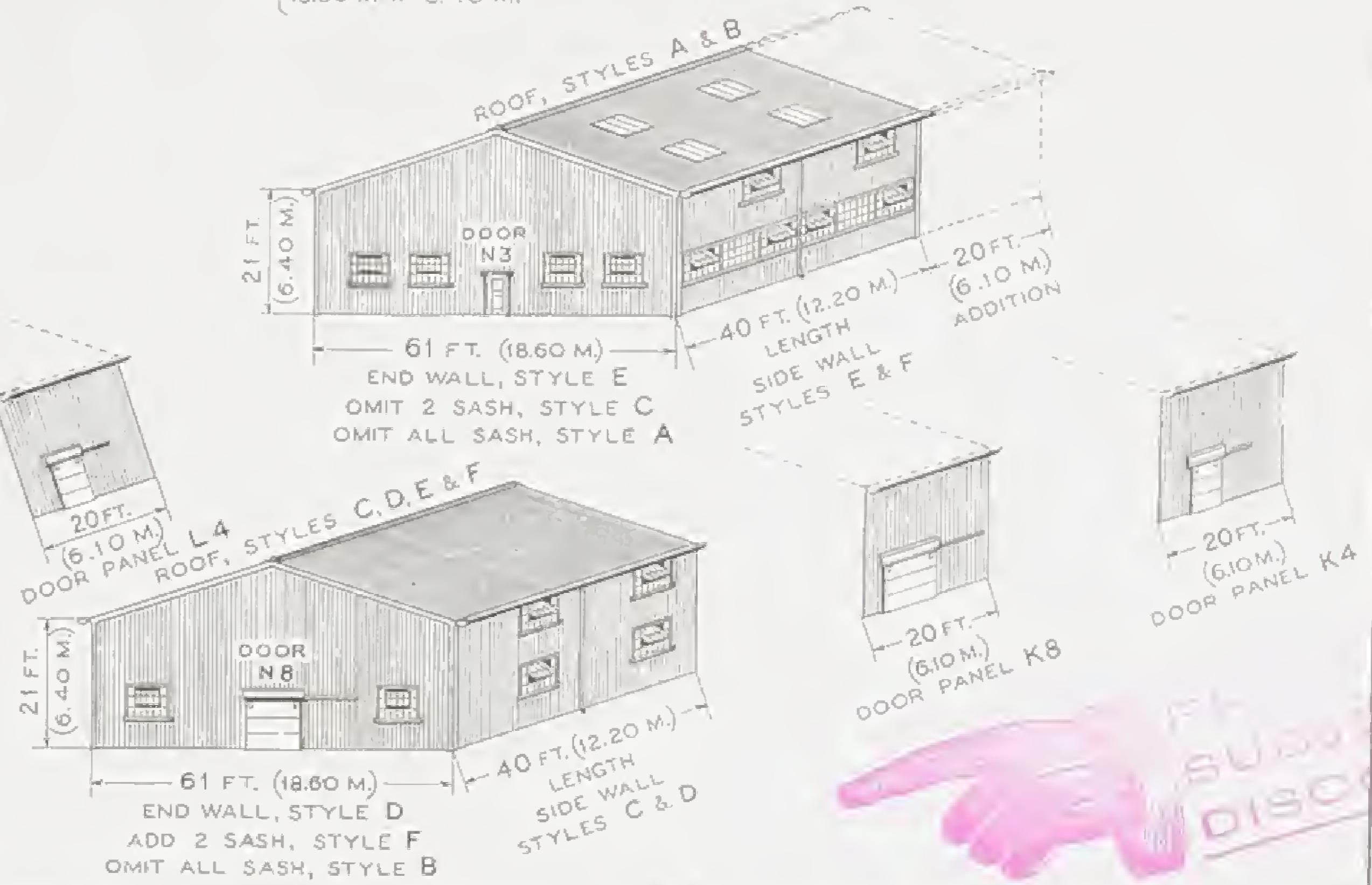
### TYPE 6S2 (SLOPING SIDES)

SIZE  
 74 FT. x 21 FT.  
 22.56 M. x 6.40 M.



### TYPE 6V2 (VERTICAL SIDES)

SIZE  
 61 FT. x 21 FT.  
 18.60 M x 6.40 M.



FOR SUBJECT TO  
DISCOUNT

## PRICE LIST OF MILLIKEN BUILDINGS

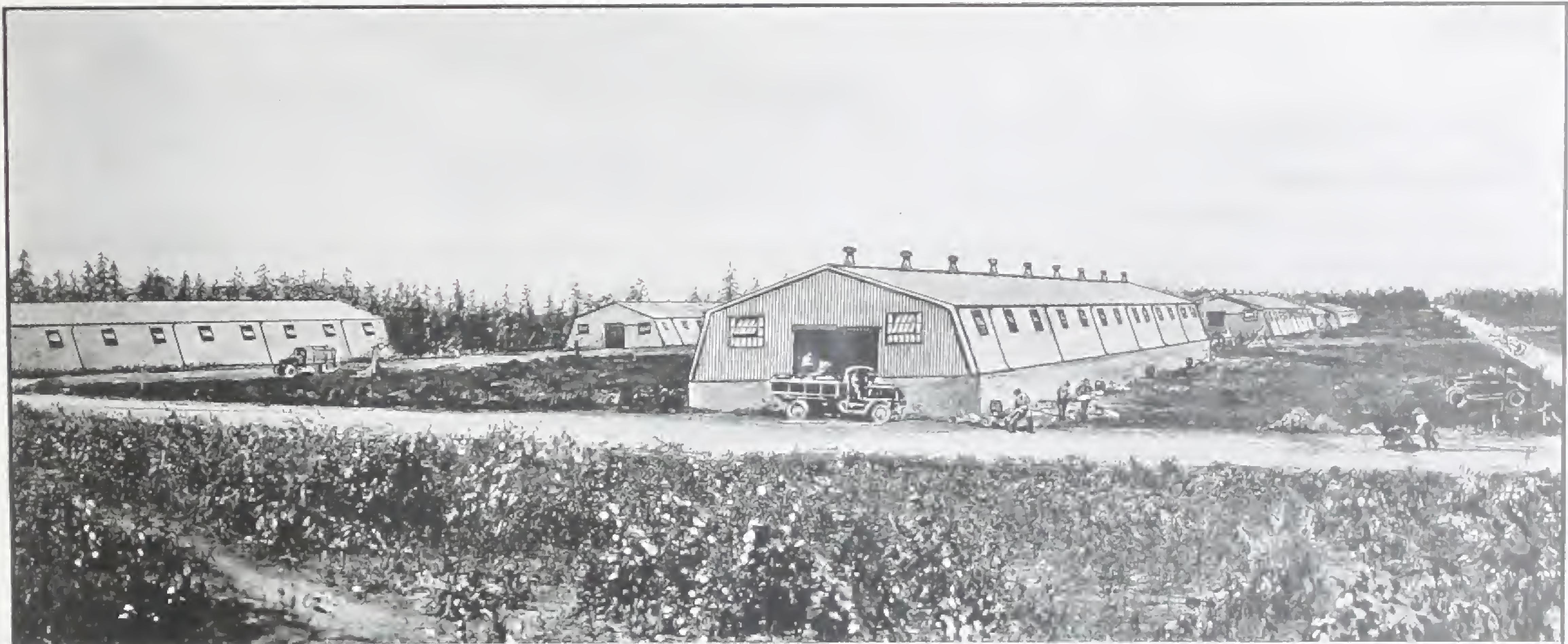
TYPE	STYLE	DESCRIPTION			LENGTH OF BUILDING					ADD FOR EACH SIDE DOOR PANEL		
		ROOF	END WALLS	SIDE WALLS	40 FT. 12.20 M.	80 FT. 24.39 M.	120 FT. 36.58 M.	160 FT. 48.78 M.	200 FT. 60.97 M.	ADD FOR EACH 20 FT. LENGTH	DOOR L8 OR K8	L4 OR K4
6S2	A	SKYLIGHT	DOOR N3	CLOSED	\$ 5360.	\$ 8360.	\$ 11360.	\$ 14360	\$ 17360.	\$ 1500.	\$ 170.	\$ 120.
	B	SKYLIGHT	DOOR N8	CLOSED	5670.	8670.	11670	14670.	17670.	1500.	170.	120.
	C	CLOSED	DOOR N3	SINGLE SASH SASH	5540.	8590.	11640.	14690.	17740.	1525.	150.	100.
	D	CLOSED	DOOR N8	SINGLE SASH SASH	5840.	8890.	11940.	14990.	18040.	1525.	150.	100.
	E	CLOSED	DOOR N3	SINGLE SASH CONT. SASH	5800.	9010.	12220.	15430.	18640.	1605.	120.	70.
	F	CLOSED	DOOR N8	SINGLE SASH CONT. SASH	6110.	9320.	12530.	15740.	19950.	1605.	120.	70.
6V2	A	SKYLIGHT	DOOR N3	CLOSED	\$ 5100.	\$ 8000.	\$ 10900.	\$ 13800.	\$ 16700.	\$ 1450.	\$ 170.	\$ 120.
	B	SKYLIGHT	DOOR N8	CLOSED	5410.	8310.	11210.	14110.	17010.	1450.	170.	120.
	C	CLOSED	DOOR N3	SINGLE SASH SASH	5270.	8220.	11170.	14120.	17070.	1475.	150.	100.
	D	CLOSED	DOOR N8	SINGLE SASH SASH	5580.	8530.	11480.	14430.	17380.	1475.	150.	100.
	E	CLOSED	DOOR N3	SINGLE SASH CONT. SASH	5540.	8650.	11760.	14870.	17980.	1555.	120.	70.
	F	CLOSED	DOOR N8	SINGLE SASH CONT. SASH	5850.	8960.	12070.	15180.	18290.	1555.	120.	70.



Page Twenty-four

EXTERIOR VIEW-TYPE 4VI BUILDING

MB  
TP



PANORAMIC VIEW SHOWING TEN BUILDINGS



OCEAN SHIPPING WEIGHTS									SEE FOOT NOTE		
TYPE	STYLE	LENGTH OF BUILDING								ADD FOR EACH 20 FT LENGTH	ADD FOR EACH SIDE DOOR PANEL
		20 FT 8' 0"	40 FT 12' 0"	60 FT 18' 0"	80 FT 24' 0"	100 FT 30' 0"	120 FT 36' 0"	160 FT 48' 0"	200 FT 60' 0"		
		TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS		
A	G	9	12	15	18					3	1.3 0.8
B	G	11	14	17	20					3	1.3 0.8
C	G	9	12	14	17					3	1.2 0.7
D	G	7	10	13	16	19				3	1.2 0.7
E	G	7	10	13	17	20				3	0.9 0.4
F	G	8	12	15	18	22				3	0.9 0.4
651 or 661	A	13		21		29	38	46	4	1.3 0.8	
	B	15		23		31	39	47	4	1.3 0.8	
	C	12		20		28	35	43	4	1.2 0.7	
	D	14		22		29	37	45	4	1.2 0.7	
	E	15		23		32	41	50	5	0.9 0.4	
	F	16		25		34	43	51	5	0.9 0.4	
651 or 661	A	19		31		43	55	67	6	1.3 0.8	
	B	21		33		45	57	69	6	1.3 0.8	
	C	18		28		38	49	59	5	1.2 0.7	
	D	20		30		40	50	60	5	1.2 0.7	
	E	20		32		43	55	66	6	0.9 0.4	
	F	22		33		44	56	68	6	0.9 0.4	

Note: The above weights for complete buildings are given in gross tons of 2,240 pounds, with allowance made for crated and board material on the basis of 80 cubic feet per ton.

Struct. work is figured shipped "knocked-down."

# OCEAN SHIPPING WEIGHTS

SEE FOOT NOTE

TYPE	STYLE	LENGTH OF BUILDING								ADD FOR EACH 20 FT. LENGTH	ADD FOR EACH SIDE DOOR PANEL	
		20 FT. 6.10M	40 FT. 12.20M.	60 FT. 18.29M.	80 FT. 24.39M.	100 FT. 30.49M.	120 FT. 36.58M.	160 FT. 48.78M.	200 FT. 60.97M.		DOOR	L8 OR K8
		TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS
2S2 OR 2V2	A	9	14	18	23	27				5	1.3	0.8
	B	11	15	20	24	29				5	1.3	0.8
	C	9	14	18	23	27				5	1.2	0.6
	D	11	15	20	24	29				5	1.2	0.6
	E	10	15	20	25	30				5	0.9	0.3
	F	11	17	22	27	32				5	0.9	0.3
4S2 OR 4V2	A		18		29		40	51	62	6	1.3	0.8
	B		20		31		42	53	64	6	1.3	0.8
	C		18		30		41	52	63	6	1.2	0.6
	D		21		32		43	54	65	6	1.2	0.6
	E		20		33		45	57	70	6	0.9	0.3
	F		22		34		47	59	71	6	0.9	0.3
6S2 OR 6V2	A		25		40		55	70	85	8	1.3	0.8
	B		27		42		57	72	87	8	1.3	0.8
	C		25		39		52	66	80	7	1.2	0.6
	D		27		40		54	68	82	7	1.2	0.6
	E		27		42		57	72	87	8	0.9	0.3
	F		28		43		59	74	89	8	0.9	0.3

Note: The above weights for complete buildings are given in gross tons of 2,240 pounds, with allowances made for crated and boxed material on the basis of 40 cubic feet per ton.

Steel work is figured shipped "knocked-down."





## SPECIAL FURNISHINGS

### ADDITIONAL ROOF VENTILATION

The opposite page illustrates several methods by which additional roof ventilation may be obtained for MILLIKEN BUILDINGS. These are supplied only when so ordered and at the additional price given.

#### Figure 1. EAVE OPENINGS

These provide a continuous opening at both eaves, the full length of building, and are weather protected by special roof overhang either in painted or galvanized corrugated steel, with or without galvanized steel gutters and leaders.

Price of Eave Openings for each 20 feet length of building:		
With gutters and leaders	Painted roofing	\$40.00
	Galvanized roofing	\$47.00

Without gutters and leaders

Painted roofing	\$15.00
Galvanized roofing	\$22.00

#### Figure 11. RIDGE MONITOR

This consists of a built-up steel monitor frame readily attached to any building, covered on roof and both ends with painted or galvanized corrugated steel and on sides with galvanized steel fixed louvers.

Price for each 20 foot length of Monitor:

Painted corrugated steel	\$140.00
Galvanized corrugated steel	\$150.00

Note: All prices in U. S. currency, f. o. b. cars or f. a. s. New York.



FIGURE 11. RIDGE MONITOR



FIGURE 11. RIDGE CIRCULAR VENTILATOR



### Figure 11. RIDGE CIRCULAR VENTILATORS

These are standard galvanized steel rain-proof ventilators, provided with suitable base for attaching directly to corrugated roofing.

Price for each Ventilator:			
12 inch diameter	\$10.00	20 inch diameter	\$20.00
16 inch diameter	\$15.00	24 inch diameter	\$25.00

### "ALL-STEEL" FOUNDATIONS

The foundations illustrated below are of structural steel, readily fitted to the Unit columns of all buildings with sloping sides, viz: Types 251, 451, 651, 252, 452 and 652. In ordinary good earth these foundations will furnish all necessary stability to the building, so that concrete or other forms of foundations may be entirely eliminated. The steel is painted or galvanized.

With the use of these foundations all that is necessary is to dig trenches, each 2 feet wide by 3 feet deep, set the foundations and refill with well tamped earth.

Price for each foundation:		
For Type 251, 451 or 651 columns	Painted	\$13.00
	Galvanized	\$17.00
For Type 252, 452 or 652 columns	Painted	\$21.00
	Galvanized	\$28.00

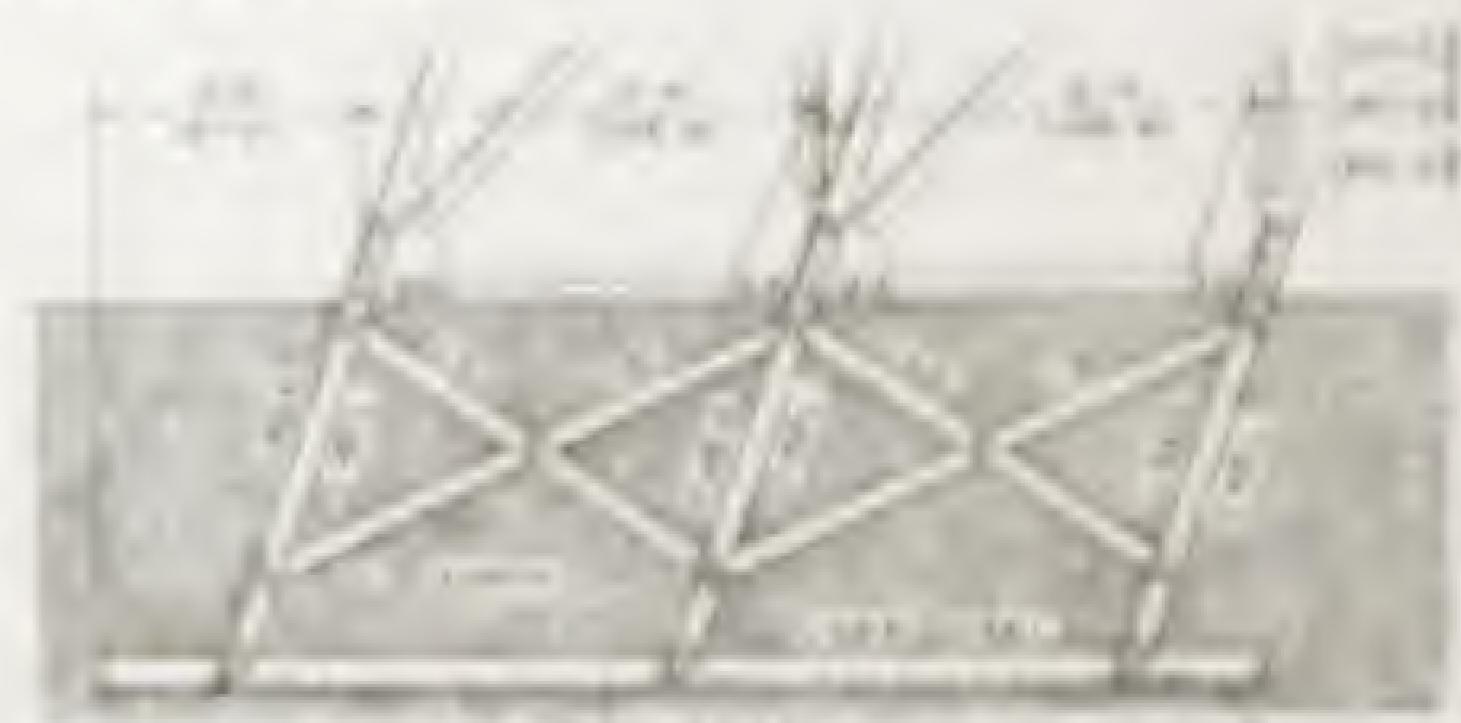
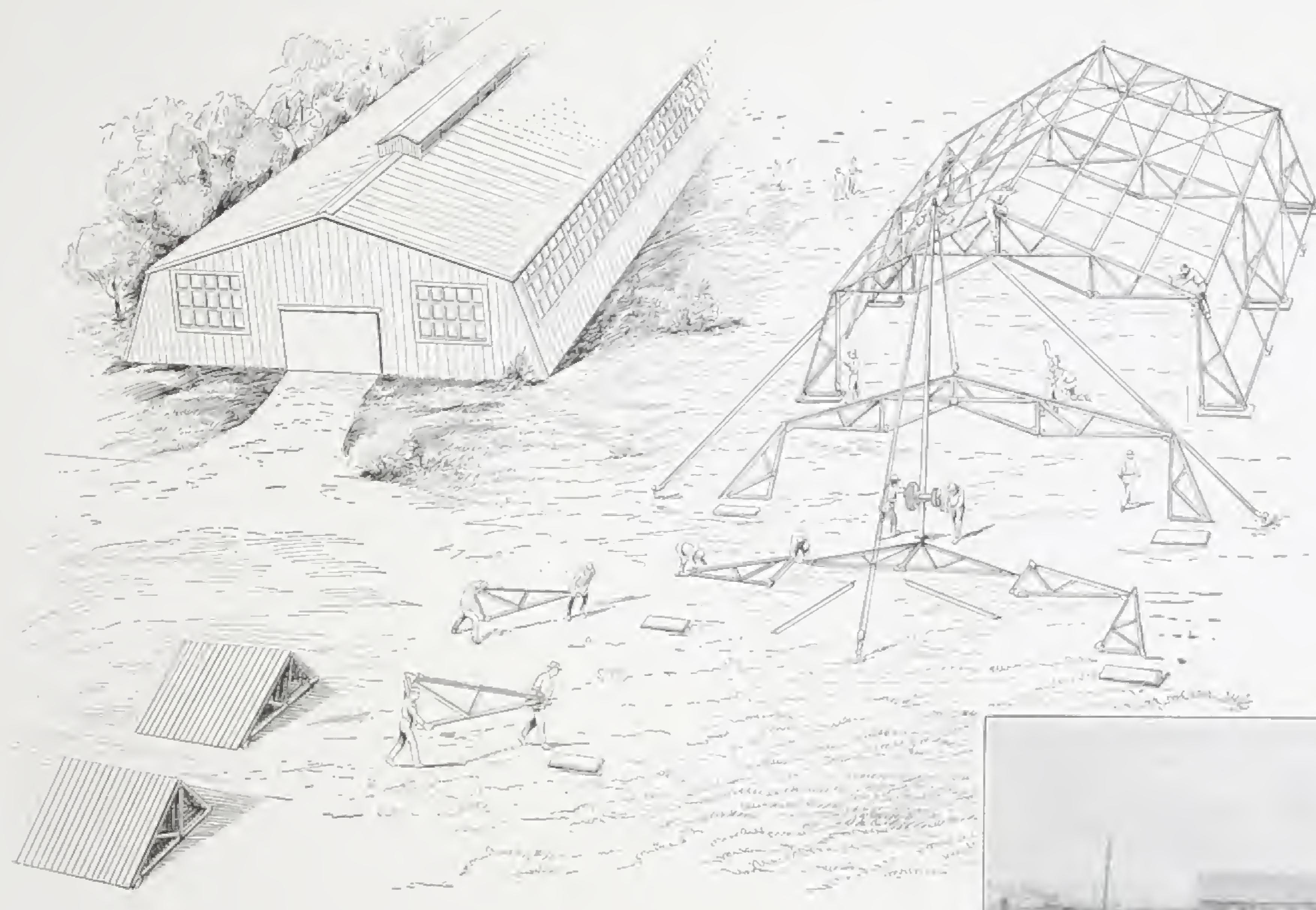


FIGURE 11. RIDGE CIRCULAR VENTILATOR  
"ALL-STEEL" FOUNDATIONS FOR BUILDING  
TYPES 251, 451, 651, 252, 452, 652





OVER TWO THOUSAND "UNITS" READY FOR ERECTION



## ERECTION

The simplicity of erecting the MILLIKEN BUILDING is one of its attractive features. The tools required consist merely of a gin pole, a hand winch, hoisting rope and a few wrenches. No riveting necessary.

A detailed description of the approved method of assembling and erecting MILLIKEN BUILDINGS is given in the ERECTION HANDBOOK, Catalog No. 11, which will be furnished on request.

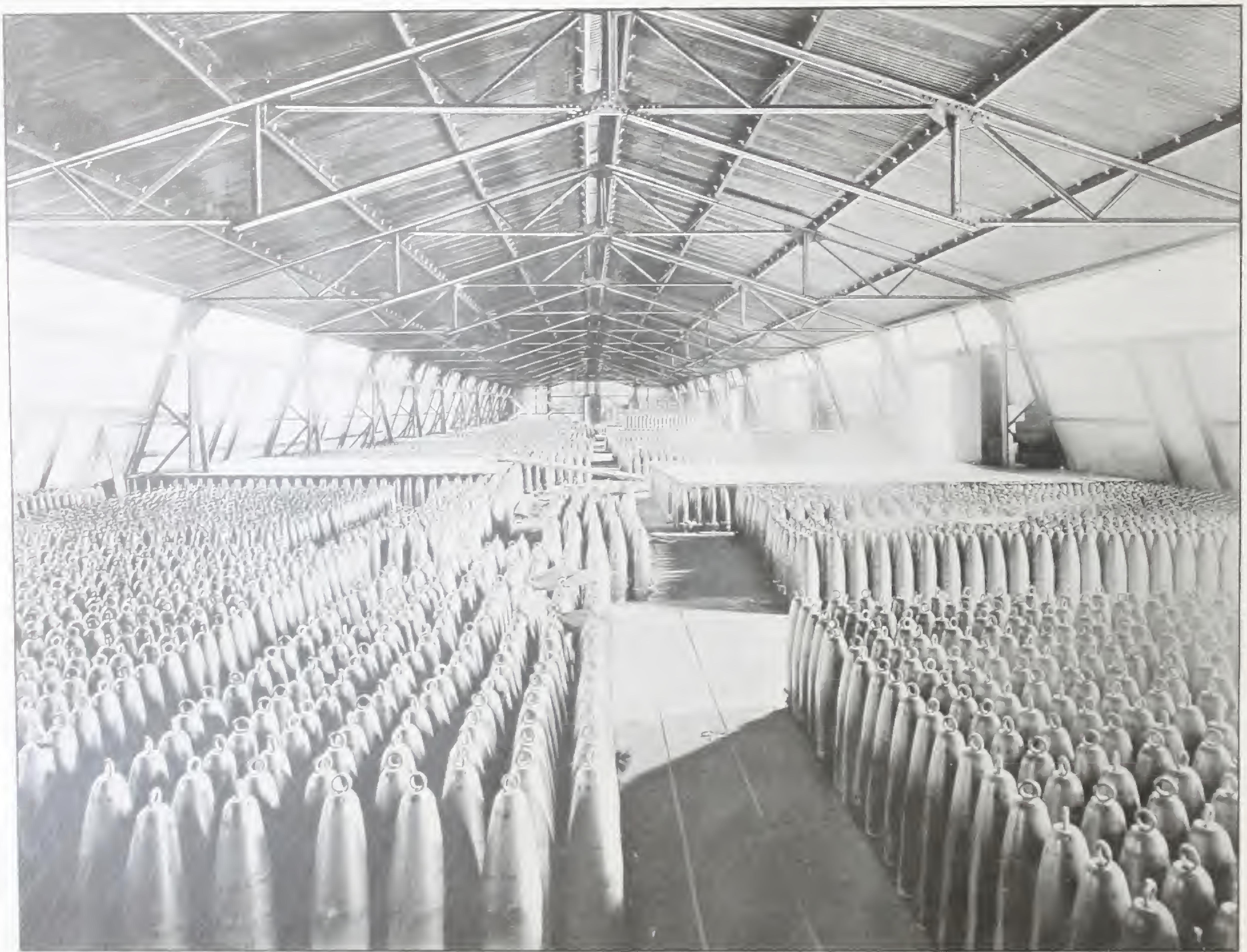


Page Three-hundred

A BUILDING IN THE SOUDAN, AFRICA



3  
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Page Thirty-four

INTERIOR VIEW-TYPE 4S1 BUILDING



STEEL FRAME-TYPE 2S1 BUILDING

SB  
1  
35



新嘉坡植物园内的一座大型温室



**OTHER  
MILLIKEN STEEL SPECIALTIES**

**GALVANIZED STEEL TRANSMISSION TOWERS**

**GALVANIZED OR PAINTED STEEL RADIO TOWERS**

**GALVANIZED STEEL PINLOCK POLES**

**DESCRIBED AND ILLUSTRATED ON THE FOLLOWING PAGES**



## MILLIKEN GALVANIZED STEEL TRANSMISSION TOWERS

**H**IS is the day of high-tension, long-distance electric power transmission. Reaching from remote water power sites, these transmission systems supply electric light, heat and power with equal facility to large cities and to widely scattered smaller communities, and at lower service rates than are possible with local steam generating stations. It is also frequently found of great advantage and economy to establish steam-operated generating plants directly at the coal mines, with transmission lines to carry the power to distant points of consumption. This saves the expense of transporting the coal.

The MILLIKEN Galvanized Steel Transmission Tower has been a prominent factor in the development of this work because of its ability to meet the most exacting requirements. Care and accuracy in design, best materials, right methods of manufacture, galvanizing and shipping have made this tower in great demand by leading power companies.

Thousands of MILLIKEN towers of this type have been in use for many years under the highest degree of satisfactory service by a majority of large power companies in the United States, in South America, Mexico, Tasmania, Afghanistan, India and other countries.

The material is of open-hearth structural steel of a grade providing high resiliency and maximum strength. Special methods of manufacture insure against field corrections, while the method of galvanizing each individual part with a heavy coating of zinc spelter makes for permanency and eliminates renewal for many years to come.

For best results, transmission towers should be designed to meet the specific line and installation conditions—this is the MILLIKEN way. Those considering such construction are accordingly requested to furnish brief data, as follows, and upon receipt, designs and prices will be sent:

Location, length and voltage of line. Number, size and material of wires. Type of insulators, pin or suspension.

The opposite page sets forth a group of typical MILLIKEN towers, *showing types that will meet any transmission line condition.*



1945-1950  
Transmission towers



1945-1950  
Transmission towers



1945-1950  
Transmission towers



1945-1950  
Transmission towers



1945-1950  
Transmission towers



## MILLIKEN STEEL RADIO TOWERS

**M**ILLIKEN steel, self-supporting radio towers are in satisfactory service at important wireless stations the world over, meeting climatic conditions varying from the arctic storms of Alaska to the hurricane storms of the Gulf of Mexico—and with every ability to withstand these situations.

MILLIKEN towers of this type are in use by the Governments of Colombia, Cuba, Mexico, New Zealand and Santo Domingo; by the Government of the United States in the Signal and Coast Artillery Service; by the Marconi Wireless Telegraph Company of America, the Western Electric Company and many other important interests.

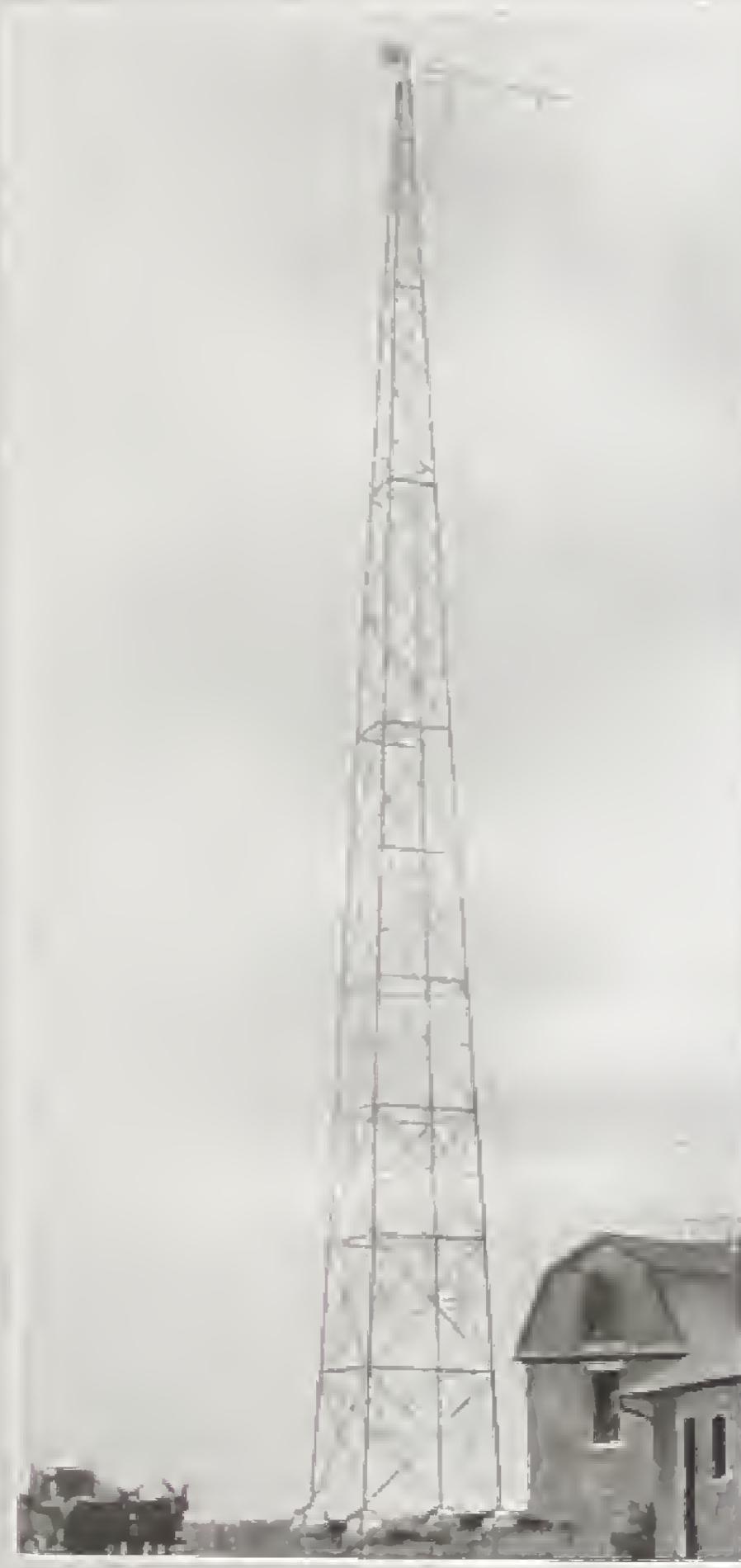
The same materials and methods used for the well-known MILLIKEN transmission towers are employed for radio tower construction, assuring the purchaser of a first-class structure in every detail.

The members of the towers are of structural steel angle bars throughout, affording ample rigidity against wind force and aerial pull. All members are of a size and weight to allow convenient handling, while all connections are bolted, thus making erection a matter of great simplicity.

MILLIKEN Radio Towers are made in two types, the first covering those varying in height from 66 feet to 165 feet, inclusive, and the second, specific heights of 200, 225, 250 and 300 feet. The design and construction of the first noted is along the lines of MILLIKEN transmission towers, with light-weight minor members, all galvanized. Towers of the second type are of heavier construction, either painted or galvanized, as desired.

The opposite page shows a group of MILLIKEN Radio Towers of the two types mentioned.

Any desired information and prices will be gladly furnished on request.



145 FEET HIGH  
NEW YORK HARBOR



300 FEET HIGH



165 FEET HIGH  
FORT MONROE, VA.



200 FEET HIGH—MIAMI, FLORIDA



LOWER PORTION OF 300-FOOT TOWER  
DURING ERECTION



300 FEET HIGH—TEXAS



## MILLIKEN GALVANIZED STEEL PINLOCK POLES

**L**IIGHT-WEIGHT steel poles are frequently desired for low voltage electric transmission or distributing systems on account of narrow base width and moderate requirements of strength and dimensions. Such poles are suitable also for the support of trolley or catenary construction, telephone and telegraph lines, electric lights, signs and the like, providing ample and permanent strength with minimum space requirements at the ground line.

The MILLIKEN PINLOCK pole is a patented galvanized steel latticed pole made with two steel channel bars and a complete system of diagonal bars firmly joined together by means of a self-locking power-driven steel pin.

The material is of open-hearth structural steel having high resiliency and maximum strength. These characteristics insure uniformity of pole strength, with desired flexibility when subjected to wire breakage. Prior to assembling of individual pole parts, all material is acid-cleaned from mill-scale and dirt, washed and fluxed. It is then dipped in molten zinc spelter until a heavy coating of galvanizing has been given to the entire surface of the material, including the inside of all bolt holes.

This special method of galvanizing gives permanency to the life of the pole and eliminates the need of periodical painting. *When you build with galvanized steel Pinlock poles there are no renewals.*

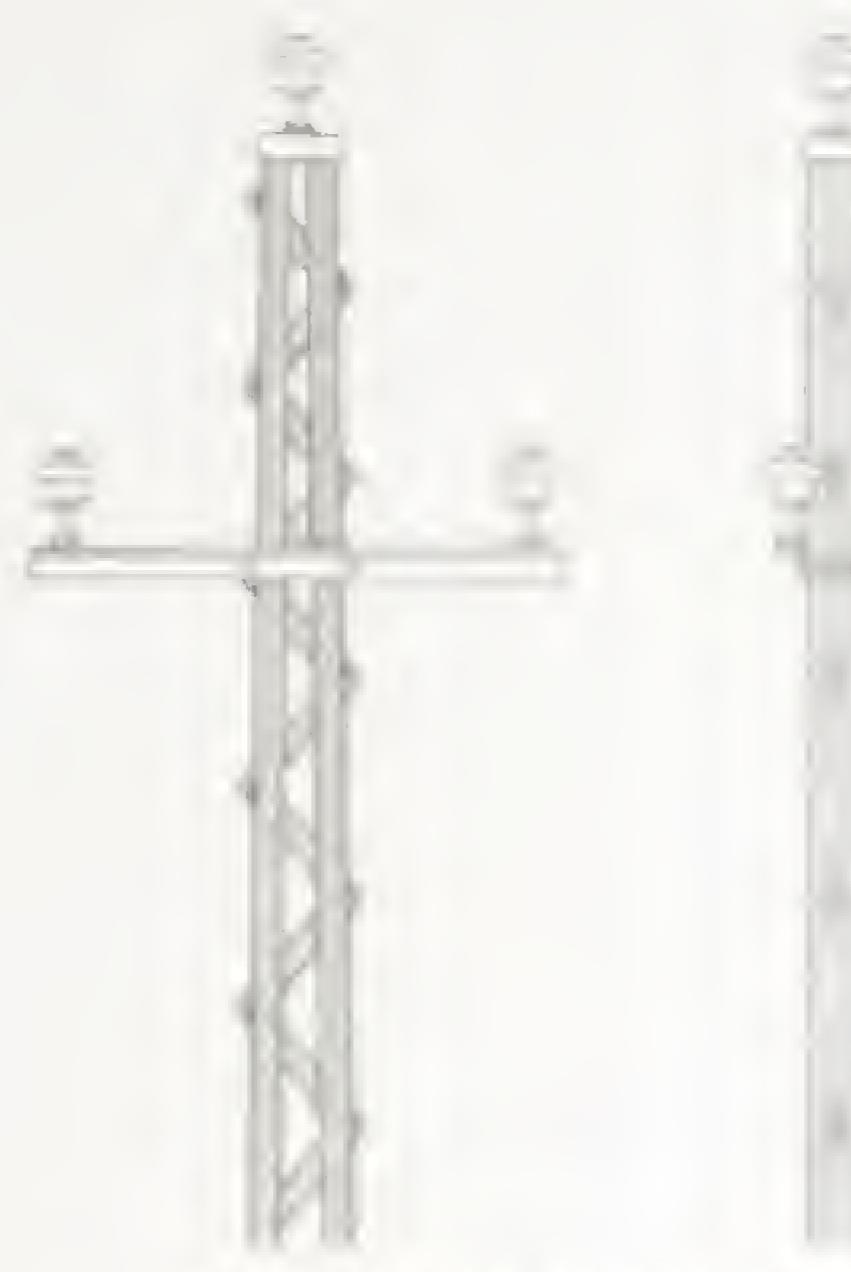
Poles are completely assembled at our plant and shipped ready for attaching cross-arms or other fixtures. These attachments may be made at any desired point on the poles by means of a special clamp.

The opposite page illustrates a few suggestive uses for the poles, and gives a table of pole properties. As will be noted, by means of the spread base, ample strength and rigidity is afforded in a transverse direction. This is a desirable requisite when the poles are used for transmission, telephone or telegraph line service for withstanding the wind pressure across the line; and for trolley and electric light poles, etc., for withstanding the bending stresses produced by the one-sided cross-arms.

Prices for poles will be given on request, including such attachments as desired.

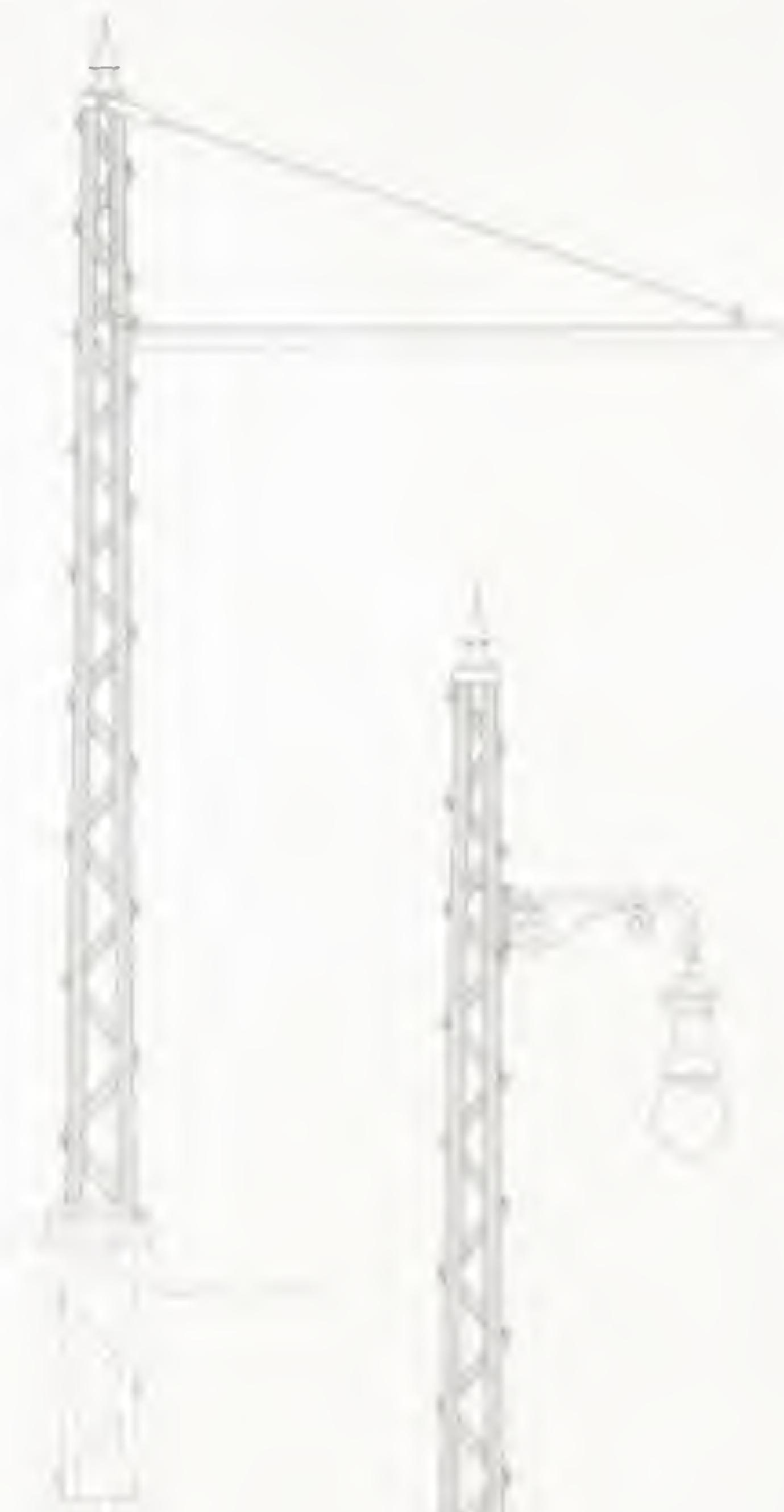


PINLOCK POLE



TRANSMISSION POLES

SECTION	WIDTH AT BASE IN INCHES	WEIGHT IN POUNDS OVER ALL	LENGTH IN FEET	SAFE LOADS IN POUNDS				
				SET IN GROUND	HORIZONTAL MOVE ACROSS GROUND	PULL AT TOP ALONG LINE	VERTICAL LINE	
4 INCHES	11	257	19	4	15	1000	540	29300
	11 $\frac{1}{2}$	295	27	6 $\frac{1}{2}$	17 $\frac{1}{2}$	1800	580	35800
	12 $\frac{1}{2}$	333	36	5	20	1200	260	31400
	13 $\frac{1}{4}$	365	50	5 $\frac{1}{2}$	24 $\frac{1}{2}$	800	170	18800
5 INCHES	11 $\frac{1}{2}$	335	32	4 $\frac{1}{2}$	17 $\frac{1}{2}$	2500	700	11200
	12 $\frac{1}{2}$	420	48	5	21	1800	480	20500
	13 $\frac{1}{4}$	482	50	5 $\frac{1}{2}$	24 $\frac{1}{2}$	1400	380	28100
	14	575	35	6	28	1000	250	23300
6 INCHES	12 $\frac{1}{2}$	500	28	5	21	2500	640	43600
	13 $\frac{1}{4}$	575	30	5 $\frac{1}{2}$	24 $\frac{1}{2}$	2000	810	41000
	13	615	35	6	29	1600	460	36000
	15	773	40	6	34	1000	550	50000
	17 $\frac{1}{2}$	810	45	6 $\frac{1}{2}$	40 $\frac{1}{2}$	1000	230	23800



TROLLEY  
POLES

ELECTRIC  
LIGHT POLES

GALVANIZED STEEL  
PINLOCK POLES



## INDEX

	Page
Meeting the Needs of the Day .....	4
Illustration, Group of Buildings .....	5
Illustration, Steel Frame .....	6
STANDARDIZED TRUSS UNIT SYSTEM .....	7-9
MILLIKEN BUILDINGS .....	10-11
SPECIFICATIONS AND PRICE LISTS .....	12-23
Illustration, Exterior View Type 4V1 Building .....	24
Illustration, Panorama .....	25
OCEAN SHIPPING WEIGHTS .....	26-27
SPECIAL FURNISHINGS .....	28-29
Illustration, Two Thousand Units .....	30
ERECTION .....	31
Illustration, a Building in the Sudan, Africa .....	32
Illustration, showing Clear Span Construction .....	33
Illustration, Interior View, Type 4S1 Building .....	34
Illustration, Steel Frame, Type 2S1 Building .....	35
Illustration, Interior View, Type 4V1 Building .....	36
MILLIKEN TRANSMISSION TOWERS .....	38-39
MILLIKEN RADIO TOWERS .....	40-41
MILLIKEN PINLOCK POLES .....	42-43

CABLE ADDRESS:  
"MILLIKBROS." NEW YORK

# MILLIKEN BROTHERS MFG. CO., INC.

WOOLWORTH BUILDING, NEW YORK, U. S. A.

## TELEGRAPH CODE

The following code words have been established for convenience in designating MILLIKEN BUILDINGS of any Type, Style and Length, as well as miscellaneous furnishings, all described in Catalog No. 10. These code words can be used in conjunction with standard codes. We request the use of Bentley's or Western Union whenever possible.

### Code words designating Buildings

TYPE OF BUILDING	STYLE					
	A	B	C	D	E	F
Type 2S1	Babul	Batch	Begot	Bilin	Boggy	Brawl
" 2V1	Bucca	Baton	Beige	Birth	Bogus	Bream
" 4S1	Badge	Bavin	Belay	Bison	Bolus	Breve
" 4V1	Baggy	Beach	Belch	Blain	Bonny	Bride
" 6S1	Bairn	Beamy	Besom	Blare	Bosky	Brier
" 6V1	Baize	Beard	Betel	Bleak	Bouch	Brisk
" 2S2	Baker	Beast	Bezam	Bless	Bower	Brite
" 2V2	Bandv	Bedew	Bezel	Blind	Boyar	Brock
" 4S2	Banjo	Beech	Bitid	Bliss	Bragg	Broma
" 4V2	Basal	Beefy	Bigot	Bloat	Brail	Brook
" 6S2	Basic	Befit	Bijon	Blond	Brant	Brose
" 6V2	Basso	Befog	Bilbo	Boast	Brave	Broth

### Code words designating Lengths

20 Feet ( 6.1 Meters) Laban	220 Feet ( 67.1 Meters) Leggo
40 " (12.2 " ) Lager	240 " ( 73.2 " ) Lemur
60 " (18.3 " ) Laity	260 " ( 79.3 " ) Libra
80 " (24.4 " ) Lalus	280 " ( 85.4 " ) Ligan
100 " (30.5 " ) Lambo	300 " ( 91.5 " ) Lilac
120 " (36.6 " ) Lamia	320 " ( 97.6 " ) Lingo
140 " (42.7 " ) Lance	340 " (103.7 " ) Locus
160 " (48.8 " ) Largo	360 " (109.8 " ) Lotto
180 " (54.9 " ) Lasso	380 " (115.9 " ) Lucan
200 " (61.0 " ) Leach	400 " (122.0 " ) Lurid

### Code words designating Miscellaneous Furnishings

Door L4.....	Madam	Door K4.....	Merit
" L8.....	Magic	" K8.....	Momus
" N3.....	Mango	" N8.....	Monad
Eave Openings with gutters and leaders .....			
..... Moose			
Eave Openings without gutters and leaders .....			
..... Motiv			
Ridge Monitor .....			
..... Motto			
Ridge Circular Ventilator 12 inch Diameter .....			
..... Mound			
" " " 16 inch " .....			
..... Mower			
" " " 20 inch " .....			
..... Mummy			
" " " 24 inch " .....			
..... Music			
All-Steel Foundations.....			
..... Murko			

